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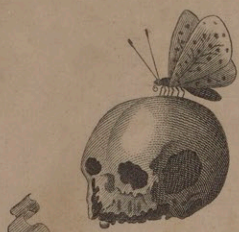

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REASONS

Againſt the

INOCULATION

OF THE

SMALL-POX.

In a LETTER to Dr. *JURIN.*

BEING

A full ANSWER to every Thing which Mr. *Maitland* and others have advanced upon that Subject.

WITH

A particular ACCOUNT of the late Miſs ROLT's Caſe, as atteſted under the Hand of the Honourable Mrs. ROLT, her Mother.

By Francis Howgrave, *Apothecary.*

——— *Quid non mortalia pectora cogis*
Auri ſacra fames? ——— Virg.

LONDON:
Printed for *John Clark* at the *Bible* under the *Royal-Exchange.* MDCCXXIV.

REASONS

Againſt the

INOCULATION

OF THE

Small-Pox, &c.

SIR,

I Am not inſenſible I enter upon this Diſpute with ſome Diſadvantage, ſince the Advocates for Inoculation have prevail'd with their Royal Highneſſes, and ſeveral Noble Lords and Perſons of Diſtinction, to ſuffer their Children to undergo this Method; it may therefore be thought Preſumption in me to write againſt it, ſince their great Quality has ſo much recommended it to the World: However, as it is impoſſible, by what has hitherto been advanc'd, (either

2077

by *Yourſelf* or Mr. *Maitland*) to be aſſur'd of Succeſs in this Affair; I don't doubt but both of You will excuſe publiſhing my Sentiments to the World; ſince I really have no other Intention, than to promote the Security of Mankind. And could I ſee the leaſt Reaſon to believe what Mr. *Maitland* ſo poſitively aſſerts, *Page* 2. *viz.* That this is a *certain Method of relieving Mankind, and reſcuing them from the Fears and fatal Effects of that very loathſome and malignant Diſeaſe*; I ſhould then as readily promote this Practice as any of thoſe Gentlemen, who now appear ſuch great Sticklers for it.

It would have conduc'd very much to the convincing us of the *Reaſonableneſs* and *Neceſſity* of this *Practice*, if the Promoters of it had given an Account how the Matter, with which they Inoculate, affects the Blood; and ſhewn, how this Method muſt ever have in its Conſequences a good Effect upon our Bodies. This would have given Satisfaction even to the moſt Scrupulous, and readily have engag'd all Perſons in favour of their Practice: This would have been coming to the main Point; but this Mr. *Maitland* was well appris'd was too difficult an Attempt, ſo he leaves it (as he does the finding out the beſt Method of Cure) *to the learned Gentlemen of the Profeſſion*; but yet he flatters himſelf with Hopes, that *the better and more candid Part of the Faculty will not*, nay *cannot be offended*

offended at this Method; which I ſhall prove is ſupported with no other Authority than that of his *Ipſe dixit.*

I believe all the learned Gentlemen of the Profeſſion will agree with him in this Point, that they are not *poſſeſs'd of any infallible Method or Remedy* for the curing of the *Small-Pox*; but will freely own, *'tis many times too too hard for them, and very often baffles the moſt celebrated Skill*; and while he reaſons thus, I dare ſay, he will be without an Adverſary. But when he propoſes a Method, which may in ſo many Particulars be *unſafe*, I can ſee no Reaſon why the World ſhould be obliged to believe it *infallible.*

Would he but conſider the Nature of our Bodies, how they are made up of Variety of Diſſimilar Parts, and how eaſily the Human Machine is diſordered, he would ſoon be convinced, that there can be no ſuch *Medicine* or *Method* in Nature, as will prove *infallible* even in the moſt *trifling Caſes*; conſequently the moſt *violent Diſtempers* render all Endeavours ſtill more precarious. But I hope the following Sheets will convince him, that his *certain* and *infallible Method*, is not only *unſafe* but *uncertain* alſo.

It is a received Opinion amongſt the Antient as well as Modern Phyſicians, that this Diſtemper is Hereditary, and that all Perſons who have ever had the *Small-Pox*, were born with

with the *Seminium* in their Blood: This Opinion the *Inoculators* make appear to be juſt, from their Practice; for was there not a Prediſpoſition in the Blood to receive the morbific Matter into it, in vain would all their Attempts prove towards bringing on the *Small-Pox.*

The learned and ingenious Dr. *Mead* obſerves in his *Mechanical Account of Poiſons*, Page 84. *That what is thrown out from Liquors in a Ferment, is capable of inducing the like Motion in another Liquor of the ſame kind, when duly mixed with it:* So we may well ſuppoſe in the preſent Caſe (viz. *Inoculation*) that the *variolous Matter*, which is it ſelf of a fermentative Nature, being impregnated with an acrid Salt, thrown out of the Blood by Fermentation, *when it comes, by means of a Wound, to be incorporated with the Arterial Fluid of any one, does by degrees raiſe a preternatural Effervеſcence in it; the Effects of which will neceſſarily be moſt felt in thoſe Parts, which, being tender, are the leaſt able to reſiſt the Diſtention of the Blood Veſſels; ſuch are the Stomach, and eſpecially the Brain; and hereupon Deliria, with Maniacal, and ſuch like Symptoms, will eaſily enſue.*

Helvetius in his Eſſay on the *Animal Oeconomy*, Page 132, remarks, "That when the "Blood abounds with Humours of different "Qualities, which are likewiſe diſſolved a-

"long

" long with this *Variolous Humour*, the Dis-
" eaſe in that Caſe cannot be ſimple, but
" muſt be complicated.

" The *Variolous Humour* may indeed whol-
" ly unite with the *Materia Perſpirabilis*, and
" ſo be thrown upon the cutaneous Glands:
" But the other Juices, whoſe Natures are
" different, and which do not take this
" Courſe, keep up the Heat of the Fever,
" form Obſtructions in the other Glands, ſuch
" as thoſe which certainly exiſt in the Lungs,
" and perhaps in the Membranes of the Brain,
" *&c.* and by that means produce inflamma-
" tory or malignant Fevers, which render the
" *Small-Pox* ſo fatal. In ſhort, it is the diffe-
" rent Genius of thoſe Humours, which cauſes
" that Variety in the malignant Kinds of the
" *Small-Pox.*

From hence, I hope, it will appear to any impartial Perſon, that the *Danger* in the *Small-Pox* is not ſo much from it ſelf, as from the other ill *Qualities* which are lodged in the Blood: For while Nature is employed in diſcharging the morbific Matter, theſe other ill Qualities riſe and ferment at the ſame time, which makes the *Small-Pox* very often prove fatal.

It appears from hence, " * What a vaſt *Va-*
" *riety* there may be in the Fermentations
" even of one and the ſame Fluid; for theſe

* Dr. Mead's Mechanical Account of Poiſon, Page 18.

" being

" being no other than Changes made in the " *Cohæsion* of the compounding Particles, are " capable of as many Alterations as *Mo-* " *tion* in its *Degrees* and *Directions* can admit " of, which are really infinite.

Theſe Accidents, I preſume, the *Inoculators* can no more prevent by their new Method, than if the *Small-Pox* had come by Infection; ſo that I can't ſee why the Danger is not as great the one way as the other, ſince the whole Maſs of Blood and Juices muſt undergo the ſame Alteration. This at once ſhows they can never be certain of procuring a good Kind, and alſo fairly accounts for the great Number of *Small-Pox*, with which many (who have undergone this Operation) have been afflicted.

But to encourage us to come the more readily into this *new* and *ſtrange Method*, as he calls it, he ſays, Page 5. *The Diſorder both before and after the Eruption, was ſo very ſlight and gentle* (in thoſe that had it in *Turkey*) *that in ſtrictneſs of Speech, it could not be called a Diſeaſe, having none of the uſual Complaints of Pain in the Back, Vomiting, Head-achs, Thirſt, Inquietude, or the like, the Pulſe being only ſomewhat fuller and higher than before; yet ſo far from a Fever, that it ſcarce deſerves the Name of a* Febricula.

Was it always to have this Effect on thoſe who undergo this *new* and *ſtrange Method* in *England*, our Minds would ſoon be freed from

from all Uneaſineſs; nor ſhould we entertain in our Thoughts the leaſt Dread or Apprehenſion of Danger, and it would moſt certainly engage all Perſons, to embrace the firſt Opportunity of avoiding thoſe Dangers the *Small-Pox* oft brings along with it. But Experience convinces us of the contrary; for before the Eruption of the *Small-Pox*, they who were inoculated, have complained of *great Pains in the Shoulders and Knees, in the Back and Head, attended with Shiverings and Vomitings*, and other Symptoms which oft precede the Natural kind, as you have been pleas'd to inform us: Neither are they ſo happy in the Concluſion, as that great Champion ſets forth; but of this in another Place.

He obſerves again, Page 17. "Were it not "altogether foreign to his Deſign, and incon-"ſiſtent with the Brevity he propoſes, he "could eaſily demonſtrate why the ſmall "Quantity of Matter inſerted into the Capil-"lary Veſſels of the Skin, is not capable of "altering or diſſolving the Maſs of Blood, as "it happens in the Caſe of Infection; nor of "raiſing an Ebullition ſufficient to produce "a Fever, and the dangerous Symptoms "which always follow upon it.

I do aſſure this Author, however foreign He may think this to his Deſign, if he could have made this plainly appear, it would have entirely eſtabliſh'd this *ſtrange* and *new Me-*

thod; this being the Basis on which he builds his Practice; so that it is absolutely necessary to have this Point cleared. I hope he does not think the World is to be amus'd with a Company of fine *gentle soft* Words, and deluded into Misery, by the specious Pretence of an *infallible Security*, without any Grounds, but what are form'd in the wild Imaginations of his own Brain. Nay, he himself is convinc'd this is not consistent with Truth; which is of such Force, as to break out from that Cloud of Errors which surround him, and make him contradict his own Assertions; for he observes, Page 27, Mr. *Heath's Son was taken very ill before the Eruption*: And the Difficulty with which a Person of the *First Quality* lately recovered, is sufficient to convince us how untrue his Accounts are.

But should I allow what he here says to be true; there will one Difficulty remain, which, I own, I cannot easily get over, and that is this: If Inoculation *does neither alter nor dissolve the Mass of Blood*, how can we have any Certainty, that the *Seminium* of the *Small-Pox*, supposed to be inherent in our Blood, will be, by this Method, entirely discharged? For Dr. *Willis* observes, that if this Discharge is in the least Imperfect, the Patient will be exposed to a *second* Attack of this Disease. How then can he so assuredly boast of Success, and say, that there is not the *least Danger of a Return*; when he will not allow the Blood

Blood ſcarcely to be *fermented*, no not *altered?* There can, I fear, be but little Dependance upon having all the morbific Matter diſcharged; and if it is not, we are certainly ſtill liable to undergo the Fatigues and Dangers of this Diſtemper; notwithſtanding all he ſays of the *ſecurity* of this Method.

And who would run, that's moderately Wiſe,
A Certain *Danger for a* Doubtful *Prize?*

And this appears from what Dr. *Wagſtaffe* obſerves, Page 21. "The Inoculators ſay, that "none who have had the *Natural* Sort, can "ever catch them by Inoculation; this has "been contradicted by one in St. *Thomas*'s "Hoſpital; on whom the *Pimples* appear'd "rather *more fairly*, than in thoſe of *Newgate*, "tho' the *Pits* in his Face to a great Degree, "were a ſufficient Teſtimony, that he had "ſuffer'd before from this Diſtemper.

This indeed Mr. *Maitland* faintly denies; but as the Doctor has, ſince He publiſh'd his Anſwer, put out a Third Edition of his Book, and not retracted it; the World muſt judge to whom the greateſt Credit is to be given: And though perhaps the Doctor has not been in *Turkey*, yet His Authority will go as far as Mr. *Maitland's*.

If then, after a Perſon has receiv'd the *Small-Pox* by Infection, and undergone the

Fatigues and Hazards, in a *natural Way*, he may yet be affected by the *Inoculation*; sure it is possible to conclude, and that with greater Reason, that One who has been Inoculated, (whose Mass of Blood is not *altered* or *dissolved*, nay not so much *as the least fermented by this severe Method*) should be liable to Infection. This appears from the Letter Mr. *Maitland* publishes in relation to Mr. *Degrave*'s Daughter, *His Account of Inoculating vindicated*, Page 51. "Her Father there informs us, that he saw her daily during the "three Weeks that she was confin'd after "the Inoculation: No *Small-Pox* appeared "upon her during that Time, but Heats "and Flushings, attended sometimes with "Pain and Heaviness in her Head, and little "more Quickness of Pulse than usual", (These are the common Symptoms, Mr. *Maitland* observes, which attend this Method.) "But none of these Heats and Flushings "ever came to Perfection, or to any Thing "like the *Small-Pox*; tho' those that were in "the same House had a fair distinct *Small-Pox*, and yet had less Sickness than She; "nor did the Incisions in her Arms discharge "so much, and so long as theirs did. Thus "all Expectation of her having the *Small-Pox* by the Inoculation being over, she was "purg'd once or twice, and then discharg'd "from her Confinement. It was believ'd "she would never have that Distemper.

"This

" This Tryal being unſucceſsful, ſeem'd to " give a tolerable Ground for this Opinion.

But Dr. *Wagſtaffe* obſerves, that the *Inoculator* call'd it the *Small-Pox*, and aſſur'd her Parents ſhe was ſecur'd from ever having it again: " However ſhe continu'd ſtill diſcompos'd, " and out of Order, when ſhe came Home; " the Heats and Fluſhings ſtill ſubſiſting " on her, her Stomach loathing Fleſh-Meats, " and her Reſt diſturb'd with Dreams and " Horrors. She had likewiſe two ſmall Boils; " one under her Arm, and another on her " Side: Theſe continuing for about two " Months after ſhe came Home, ſhe was " purged once or twice in order to remove " them; but ſtill they ſubſiſted upon her, till " the Small-Pox broke out; and as ſoon as " they appear'd, ſhe recover'd her Stomach, " and came to her natural compos'd Sleep, " and got well in eight Days after the Ap- " pearance of the Eruption. Mr. *Degrave* is " of Opinion that the Small-Pox ſhe then " had, was the Effect of the *Inoculation*.

I think it is poſſible to allow this young Woman had the Small-Pox, firſt by Inoculation; and afterward by Infection; for ſhe had the ſame Eruptions, and was affected in the ſame manner, as Thoſe have been that were Inoculated; and though the Fluſhings and Heats continued for Eleven Weeks, yet Mr. *Degrave* ſays, theſe never came to Perfection, or any thing like the Small-Pox;

Pox ; however they did it ſeems, ſo much reſemble the *Inoculated Sort*, that the Operator aſſur'd him, *She was ſecure from ever having it again;* and he owns, *He was of the ſame Opinion.* But as the *Seminium* was *imperfectly* diſcharged, we find, that after ſome ſmall time, ſhe fell ill of the *natural Small-Pox ;* which were preceded by ſuch favourable and ſlight Symptoms, as did not hinder her from entring into the Diverſions of the Town. It is ſcarce poſſible to make a right Judgment of what they inform us concerning this Young-Woman's Caſe: The Account is ſo perplex'd, that it is much more Diſcouraging to their Practice, than Advancing the Succeſs of it. In one Part of the Letter we are inform'd ſhe had been inoculated, but without any Succeſs ; and the Eruptions which appear'd upon the Skin, were ſo different from thoſe of the True Small-Pox, that they gave over all Expectations of her having them by this Method ; but as ſoon as Experience convinc'd them, that there could be no Security from a Method attended with great Hazards and Uncertainties, (for ſhe had two Boils, which their utmoſt Skill could not remove till this Regular Sort broke out,) they then change the Story, and tell us ſhe got well over this Diſtemper, but that it certainly was the Effect of the Inoculation : Thus right or wrong, we ſee, they are determined to maintain this Method; or elſe ſure this one

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Instance is sufficient to convince us, they know little of what they are doing, and that they are very ignorant in this Method: For all must be determined by the State of the Blood, and not by their boasting of a false Security.

Here are two Things that induce me to believe the Small-Pox she had last, were not by *Inoculation*, but of the *Natural Sort*.

First, That it is common for those who have the *Small-Pox* in so very favourable a Manner as she had, to have them preceded by such Symptoms, as give them little Warning of their approaching Illness; and this has been the happy Case of many, within my own Observation.

2*dly*. It must be observ'd this young Woman was, for some Time, in the House with Persons who were inoculated, from whom she might receive the Infection; and the Continuance of them, (*viz.*) eight Days, makes it very reasonable to suppose they were no other than the true Distinct Kind.

But supposing she received the Infection from those who were Inoculated, it may be demanded how it happened, that she did not *immediately* fall; this, I think, will easily be swer'd from what Dr. *Mead* observes of the Nature of Poisons. *Page* 85. "If we consider "that Fermentation being a Change, made in "the Cohœsion of the compounding Parts of a "Fluid, it is sometimes a longer, sometimes "a shorter Time before this Alteration is "wrought

" wrought; which variety may proceed either " from the different Nature and Conſtitution " of the Ferment, or of the Liquor Fermented " and a great Number of Circumſtances be- " ſide. So that this Venom may be all the " while doing its Work, tho' the change " made by it may not be ſo conſiderable as " to be ſenſibly taken Notice of till a long " Time after."

" Nay, it may ſo happen, that the *Ferment* " being Weak may not raiſe in the Blood " any remarkable Agitation at all, till ſome " accidental Alteration in the Body unluckily " gives it an additional Force.

Such indeed was the Caſe now before us; for they obſerv'd, that three Days before ſhe fell ill, ſhe had, by violent Walking, extreamly heated herſelf, which might ferment her Blood, and bring on this Diſtemper much ſooner.

But, as a further Proof, that the *Small-Pox inoculated* does raiſe an *Ebullition greater than a Febricula*, I ſhall obſerve what he ſays, *Page* 24. *I deſign'd to have purged the three condemn'd Women on the* 24*th of Auguſt, but was prevented by their Monthly Purgations, which, I was not a little ſurpriz'd to hear, ſeiz'd them all about the ſame Time; tho' ſome of them had been obſtructed ſeveral Months before.*

He has been ſo often ſurpriz'd ſince he firſt entered upon this *ſevere* and *ſtrange Method*, that I think it is a very good Excuſe why he is

ſo

ſo inconſiſtent with himſelf; few Perſons being capable of ſaying or judging right when they are in a Surprize.

Obſtructions very often proceed from the Blood's being too Viſcid, and therefore in too unactive a State, or the Veſſels of the Womb being ſo clog'd, as to render them unfit to perform their proper Offices. From which ſoever of thoſe Cauſes Obſtructions are form'd, we are ſure the Blood muſt be fermented, before Nature can be reſtor'd to her due Courſe again: and as Inoculating the *Small-Pox* produc'd this Change upon the three Women, who had been obſtructed for ſeveral Months before, I hope he will allow me to ſay, that the Blood, by this Method, muſt have undergone a very great Change; and therefore the Event of this Practice cannot always be ſo *ſalutary* as has been repreſented. And if this was ſufficient to alter the Attraction and Cohœſion of the Blood, it muſt neceſſarily put it into a *Ferment*, and it was certainly thin'd by the *Fever*, which attended the *Small-Pox*. And as the Blood conſiſts of two Parts, *viz.* a ſimple *Lymph*, and an infinite Number of ſmall *Globules* containing a very ſubtil and elaſtic Fluid, † Theſe acute Salts, when mingled with it, do prick the *Globules* or *Veſiculæ*, and ſo let out their impriſon'd active Subſtance; which expanding it ſelf every Way, muſt

† Vid. Bernoulli de Effervescentia & Fermentatione.

neceſſarily be the Inſtrument of this Alteration, of putting Nature into her Courſe again, when ſhe had been ſo long obſtructed.

Now ſince this Method produces the ſame Alteration in Women, as if they had receiv'd the Small-Pox in a natural Way, it is neceſſary to caution him (if he is not yet convinc'd) never to perform this Operation, unleſs he is well aſſur'd, the whole Affair will be over before a *critical Time* can offer it ſelf; for even upon this one Point, he may loſe his Patient, tho' all other Affairs ſucceed according to his Deſires. For I have known an Immoderate Flux of the *Menſes* carry off Perſons of a *Plethoric* Habit of Body in the Small-Pox in a very few Days. And tho' nothing is more common than to have them break out when the Small-Pox make their Appearance, and the Patient do well; yet this has put the Phyſician always upon his Guard, to prevent any Immoderate Fluxes; leſt the Blood be fermented too much, and ſo the Spirits carried off that Way, and the Small-Pox encourag'd to fall upon the Nerves or Lungs; which has been found both very common and very fatal.

But, to ſhow how little we can depend upon this *Method* of his, I ſhall tranſcribe Part of the 27th Page. "October 12, 1721. I "inoculated *Joſeph* and *Benjamin*, Sons of "*William Heath* of *Hertford*; the firſt of a- "bout ſeven Years of Age, and the ſecond "about three; both with the ſame *Matter*

"and

" and at the ſame Time: the laſt had a very " gentle and very favourable kind, in all Re- " ſpects; but *Joſeph*, being a fat foul glutto- " nous Boy, who would not be confined to " the Rules and Directions I had ſtrictly " charged his Mother withal, as to Diet and " keeping Warm; was taken very ill before " the Eruption, and after it had a very great " Load of the continued ſmall kind, but at " laſt recover'd and did well.

Give me leave to obſerve how conſiſtent this *certain* and *infallible Method* is with his own Account: Here are, he obſerves, two Brothers inoculated at one and the ſame Time, and with one and the ſame Matter; One had a very favourable Kind, but the Other vaſtly full of an ill Sort; which is attributed to his not having a ſtrict Regard to the Rules given his Mother for him to follow. Is it poſſible for us to ſuppoſe, that this ill Kind, which this Youth laboured under, was brought on him by his being a little *unguarded* in his Conduct? No, I think he gives a better Reaſon for this Misfortune; which is this, *The Boy was one who had a voracious Appetite, was very fat and full of Humours, had a foul Conſtitution, and always fed upon Food of the coarſeſt Nature.* From this then we may juſtly infer, that his Blood could not be the moſt pure; and therefore more eaſily diſpoſed to an undue Fermentation; and the Humours, which lay latent in the Blood, being

being at that Time moved, encouraged the Small-Pox to ſhow themſelves of ſo ill a Kind; *but at laſt he recover'd and did well*; It was I ſuppoſe after the *Febricula* abated.

Men muſt ſure be very much prejudiced in favour of this Gentleman's Practice, that, after this Remark of his own, can have the leaſt Notion that this *Method* is either *certain* or *infallible*. He plainly ſhews us, that the Security of the Patient, and the Quantity and Quality of the *Small-Pox*, depend entirely upon thePurity and Diſpoſition of the Blood: but if he is not pleas'd to allow this, I ſhould be glad he would inform me, why This Boy had them not in as favourable a Manner as his Brother? To prevent this Enquiry, in the very next Paragraph, he ſays, *the Reaſon of it ſeems to be plainly this, The Younger was of a clean Habit of Body, but the Elder of a very groſs Conſtitution*. Wou'd he let the Argument reſt here, and put the Event of this *ſtrange Method* upon this plain and honeſt Reaſon, I flatter myſelf we ſhould ſoon ſee an End of this Controverſy. But this *Inoculator* ſhows us his *Ignis Fatuus*, that he may delude us into By-ways and ſtrange Roads, that we may wade in the Pools of Affliction, whilſt himſelf makes a *Property* of our Misfortunes.

The Blood is a mixt Body, and when it is once put into an irregular Motion by ſuch an *unnatural Change*, where can be the *ſecu-*

rity

rity that the *Small-Pox* is the Only Diſorder Nature is to ſtrugle with? or that our Conſtitutions are capable of bearing up under ſo dangerous a Change as this *Method* frequently produces? And that no one is, or can be ſure of this, is demonſtrable from the fatal Effects this *Method* has produc'd; as their own Accounts have ſufficiently teſtified.

Men would do well to conſider the Danger they run themſelves into by Inoculation; the Uneaſineſs they muſt undergo, ſhould a Child miſcarry by this *Method*; and the Reproaches that will ever dwell upon their Minds, for being thus fillily deluded, with the ſpecious Pretences of *ſecurity* from a Sett of Men, who, we well know, can no way have the Iſſues of Life in their Hand. This publiſhing *Security* and *Eaſe* by Wholeſale, would ſuit very well with a *Tooth-drawer* on Horſeback, or a *Quack* that mounts the Stage in *Moorfields*; (whoſe Buſineſs it is *captare Vulgus*,) but it can never have the leaſt Weight with the Phyſicians of this Nation, who are moſt juſtly diſtinguiſh'd by their Learning, and Knowledge in Phyſick, from the reſt of the World.

The Matter which is forc'd into the Blood, muſt of neceſſity corrupt the Juices, becauſe it mixes with them. And ſince ſo ſmall a Quantity, as comes from a Needle dipp'd into the Purulent Matter, is ſufficient to make ſo great an Alteration in our Blood; it is, as Dr. (*Wagſtaffe* obſerves)

obſerves) very neceſſary to be inform'd what Quantity is ſufficient for the Work: But as they have declined this Favour, I hope Mr. *Maitland* will not take it ill, if once more I call upon him to oblige us with that Account; that we may not (to make ſure of bringing on the *Small-Pox*) make uſe of great Quantities and repeated Inciſions, when perhaps the Point of a Needle dipt in the *Pus* may be ſufficient. For, what ever his Notion may be that a great Quantity of Matter, thrown into the Blood, is as ſafe, as if the Infection had been communicated by the leaſt Particle of it, I muſt own I can no way be of his Opinion; for, as it is of a *fermentative* Nature, ſurely the *more* there is thrown into the Blood, the *quicker* and *ſtronger* the Fermentation will be, and conſequently the more likely to produce the Confluent Kind.

But how is it poſſible to have any *Certainty* or *Dependance*, that the *Perſon* from whom it is taken, has a *Conſtitution* agreeable with Ours? Or that he may not have ſome *Humour in his Blood* (which may be this Way convey'd to us) very prejudicial to Our Bodies, and by this Means bring upon Ourſelves, and Poſterity, ſuch Trains of Miſery and Woe, as ſhall not be in the Power of Man to remove? May not Diſtempers of the deepeſt Die be brought upon us? May not *Cancerous* or *Leprous* Humours be at the ſame Time ingrafted? And may not the *King's-Evil* or *Lunacy*, nay, any

other

other Diſtemper be interwoven with the Maſs of Blood? And theſe are Afflictions, which muſt be confeſs'd, oft elude the greateſt Relief, that can be brought, being the well known *Opprobria Medicorum.*

The Caſe of *Miſs Rolt* is a moſt unhappy Inſtance, and fully proves to thoſe Gentlemen, what Dependance there is to be had from Inoculation. *Serjeant Amyand* ſays, by way of Excuſe, that ſhe had the *Jaundice the Year before*, and was *lately recovered of the Meaſles; and had he been informed of this before, as well as of her irregular Life, no way ſuited to one of her Years, he would hardly have adventur'd the Inoculation on her.* If theſe were ſufficient Bars to prevent their Practice, why did not *Serjeant Amyand* enquire of Mrs. *Rolt*, whether or no Miſs had lately labour'd under any Indiſpoſition, and tell her, that if ſhe had, it could not on any Account be ſafe for her to be inoculated? No Perſon will be ſo uncharitable as to ſuppoſe Mrs. *Rolt* would have conceal'd from him her late Illneſs, when ſhe was told it was of the laſt Conſequence to have a juſt Account: So that, if the Indiſpoſition, the Serjeant ſays Miſs had, would have prevented him from venturing upon the Operation; his not enquiring, ſhews they will enter upon the Work at all Adventures. And as He was a proper Perſon to judge of her Conſtitution, the Neglect of this Part of his Duty, might juſtly occaſion the

Miſ-

Miſcarriage to be laid at his Door. But I am ſurpriz'd this Gentleman ſhould aſſert he was not acquainted with her having had the *Jaundice* and *Meaſles*; when I ſhall prove by an undeniable Teſtimony, (that of Mrs. *Rolt*'s Hand) that he was fully inform'd of her State of Health, as well as of her former Illneſs; therefore as Dr. *Jurin* has juſtly obſerv'd, Page 2. *To impoſe upon the World in any Particular, is diſingenuous and baſe; but to deceive them in an Affair ſo nearly concerning the Lives of Mankind, is a Wickedneſs worthy of the utmoſt Abhorrence and Deteſtation.*

But that I may remove thoſe Excuſes, which he thinks proper to make in this Affair, I beg it may be obſerv'd, that *Miſs* had been well of the *Meaſles* about two Months before ſhe was inoculated, and duly purg'd after them; and was at the Time the Operation was perform'd, as Healthful and Well as ever ſhe was in her Life; and I dare ſay, the Serjeant thought her a very proper Perſon to venture the Practice upon. The Caſe, as the Serjeant has repreſented it, is True in ſome Particulars, but very erroneous in others: So that before I ſtate it, I ſhall beg leave to make an Obſervation or two on what he has ſaid.

" On the 10th Day after the Inoculation, " the Small-Pox appear'd of the diſtinct Kind. " The Day before the Eruption, ſhe com- " plain'd of great Pains in her Shoulders, El-

" bows

" bows and Knees, and the Fever continu-
" ing, the Small-Pox fluxed upon her the
" third Day from the Eruption; She went
" thro' the Diſtemper with Eaſe.

There are few Inſtances to be met withal in the Small-Pox, (even of the *confluent* Kind) but what, upon their firſt Appearance, are really diſtinct: But this is no Argument why they ſhould be the diſtinct Sort; for unleſs the painful Symptoms (with which they were firſt invaded) do abate, there is great Reaſon to fear the morbific Matter is not wholly ſeparated from the Blood; ſo that I wonder he can endeavour to amuſe the World with ſaying, this Lady had a good Kind, when he owns they fluxed upon her the third Day after the Eruption; and that before the Eruption, ſhe was univerſally afflicted with Pains. Again, he ſays, *They began to turn on the ſeventh Day; but 'twas not dry'd all over 'till the Fourteenth. The Fever that aroſe, then occaſion'd her being blooded.* There can be no doubt made, but this was the *ſecondary Fever*, which prov'd ſo fatal to her. Can then any Perſon ſuppoſe, *ſhe went thro' this Diſtemper with Eaſe?* No one will pay a greater Regard to Serjeant *Amyand* than my ſelf, as a *Surgeon:* For the Knowledge he has ſhown in that Art, and the Succeſs he has met withal in his Practice, juſtly beſpeak him a Perſon of the firſt Rank in the Buſineſs; but in *Phyſick*, not having made it ſo much his

Study, we cannot expect to find him altogether so finish'd.

I shall now insert this young Lady's Case, as I had it from the Honourable Mrs. *Rolt* in a Letter dated *Sept.* 16. 1724.

" When I determin'd by my Friends Per-
" swasion to have my Daughter inoculated, I
" sent for Mr. * *Amyand*, he ask'd but few
" questions about her, but I told him that
" she had the *Jaundice* about a Year be-
" fore, and some Months after a small re-
" lapse into it, that from that time she had
" been very well, till she had the *Measles* a-
" bout two months before, and getting soon
" well of it, had been ever since with a
" Relation at *Epsome*. He declar'd himself
" very well satisfied with her State of Health,
" and though I propos'd having a Physician
" to attend her, ask'd him whether there was
" not to be some preparation, and particular-
" ly mention'd, cutting off her hair; he said
" there was no occasion for any thing I had
" offer'd, that the Child would be so well
" all the course of the Disease that she would
" play about the the room the whole time,

" About five or six days after the inocula-
" tion, she was seiz'd with great pains in all
" her joynts. The Small-Pox came out a-
" bout the 10th or 11th day very violently,

* In the Letter Mrs. Rolt spells it Ameas, but as the Certificate in Dr. Jurin's Book spells it Amyand, I have altered it to the Surgeon's own Way of Writing.

" and

" and was what they call the *flux* ſort; upon
" which I propos'd again a Phyſician, Mr. *A-*
" *myand* upon it nam'd one he had a mind,
" which I conſented to, ſoon after another
" was call'd, who he ſaid underſtood inocu-
" lation: ſoon after their bleeding her there
" appear'd a ſwelling upon one of her Elbows,
" upon which I was very much flatter'd, that
" it was a mark ſhe would do well, as I was
" often in the courſe of her illneſs. In nine
" Weeks after the Inoculation, and after the
" the moſt miſerable ſuffering, that ever
" poor creature underwent, ſhe died worn
" to nothing but skin and bone. She had
" *ſix and thirty running ſores* (none of them
" having ever been heal'd) when ſhe died;
" and they were forc'd to roll up her *joynts*
" *in paſtboard*, leaſt the joynts ſhould fall out
" of their places.

" I am very ſenſible of the reports which
" have been ſpread about her, viz. that ſhe
" was eat up of the Kings evil, that ſhe had
" had the black Jaundice, and that ſhe was
" not well cur'd of that, nor of the Meaſles.
" The contrary of which, was affirm'd to me
" by thoſe who had the care of her in thoſe
" illneſſes, and as to the King's evil it never
" happen'd, either to Mr. *Rolt's* or My Family,
" nor was it ever ſuſpected by the *Phyſicians*
" who had treated her. And Mr. *Amyand*
" himſelf as I ſaid before, allow'd her to be
" in a very good condition, and fit for the O-

" peration even without the help, either of a " *Phyſician*, or any Preparation.

" After this it is very extraordinary to have " ſuch reports ſpread, and particularly that " *any man* ſhould talk in print *of the irregular* " *Life of a Child of 9 years old*; for near two " years before the Meaſles, ſhe had been at " Mr. *Caverlas* School, which is allow'd to " to be one of the beſt govern'd in England.

" I could ſay much more upon this Sub- " ject, but as every particular of this is *fact*, " the World may ſee by it the *humanity* of " having ſuch a *Misfortune* aggravated, by the " very *People*, who at leaſt ſhould ſhow ſome " repentance, for the miſery they brought up- " on an afflicted Mother.

Anne Rolt.

I have had it aſſerted to me, that the Perſon, (from whom the Matter was taken, with which this young Lady was Inoculated) had a Cancerous Humour in her Breaſt. This I could no way contradict; but muſt believe, that *Serjeant Amyand*, in Juſtice to his Patient, always takes care to get (what at leaſt He thinks) a good and proper Matter.

By this Account, I think all Perſons, who will ſuffer Reaſon to determine their Opinion, muſt be convinc'd, that Their Method has no degree of Safety in it. Beſides, the putrid Matter, which is thrown into the Blood, may lie dormant ſeveral

veral Years, and entail Miſeries on ſucceeding Generations. And this may be as rationally accounted for, as that the Venom of a Mad-Dog, ſhould be twenty Years interwoven with the Blood, and at laſt break forth with the ſame Violence, as if but juſt received; tho' with this unhappy difference, of being more deadly. And what effect This may have upon the Blood, by being ſo long mix'd with it, Time will, I fear, produce many melancholly Inſtances. This young Lady's Caſe confirms, what I before obſerv'd, that the Matter avails little, but all depends upon the Blood: Now, as we can never come to any exact Knowledge what State that Fluid is in, Inoculation muſt be vaſtly precarious; and ſhould I allow, what they ſo earneſtly contend for; *that more do eſcape*, yet every particular Perſon may have juſt reaſon to be alarm'd; ſince the *Confluent*, the *Cryſtalline Sort*, *Tumours*, *Leproſie*, *King's-Evil*, or *Death* itſelf (for ought that Mr. *Maitland* can tell, or any one elſe can warrant) may, by this *Method* of propagating Diſeaſes, be His hard Fate.

The *Inoculators* furniſh us with one Inſtance of a Perſon Inoculated, that never had the *Small-Pox*, yet had a Nervoſe Malignant Fever brought upon him by the *corroſive Matter* they had forc'd into his Blood, which prov'd fatal to him: And this was, I hope, more than what Mr. *Maitland* calls *a little*

hurt

hurt done. But to the Case, "* *Francis Ba-*
" *con*, Esq; 17 Years of Age, was inoculated
" Sept. 11, 1723. No Fever, nor any sort of
" Eruption follow'd; he was kept in breathing
" Sweats in Bed the 9th and 10th Day; a Day
" or two after he was purged, and so a 2d,
" and a 3d Time.

The not meeting with Success in this Attempt, would, I believe, have guarded a Cautious Person, from making a fresh Attack upon so weak a Constitution, as Dr. *Offley*, the *Inoculator*, informs us he had. *He was subject to Fevers attended with Nervous Symptoms.* Surely this Gentleman could not be a proper Subject for them to try their *severe method* upon. But such is their Obstinacy and Resolution, either in regard to their Interest, or the Hopes of giving Credit to their Practice, that they won't be prevail'd upon to lay it aside, by the Disappointments they meet withal, or the ill Habit of Body the Patient may lye under. For *October* 1, I find they made a Second Attempt, but with no Effect; he was then purged as before, and releas'd from his Confinement; but what with *Purging*, *Sweating* and his *Confinement*, they observ'd he *look'd Paler than usual.*

I am willing to appeal to Dr. *Offley*, Whether a Person *subject to Fevers, attended with*

* Vide Dr. Jurin's Account, Page 24.

Nervous

Nervous Symptoms, can with any Degree of Safety, undergo Inoculation? Or, Whether uſing ſo many Sweating and Purging Medicines, is an approved Practice in Nervous Caſes? If it is, I muſt own it is a Practice I was hitherto unacquainted with.

But if it ſhould be replied, that there was a Neceſſity of taking this Method with him, becauſe the Inoculated Matter muſt again be thrown out of the Blood. Can any thing be more Barbarous; than to ruin a Conſtitution at preſent, only in Hopes to prevent a Diſtemper which he was in no immediate Danger of, and which perhaps never might have ſeiz'd him? After this Confinement, when he went abroad, "*He complain'd of a Pain in his Head and Limbs; his Pulſe was ſtrong, and Urine high colour'd, but this went off in 3 Days; About Chriſtmas he was taken ill of a Nervous Fever, and died on the 5th of* January. *A little before his Death, a great Quantity of Blood and Matter guſh'd out at his Noſtrils.*

"Now, as Mr. *Degrave* ſays, may we not "conclude from the Symptoms, that this *Gen-* "*tleman* was by Times afflicted with, during "the *fifteen Weeks* after he had been Inocula- "ted, that it appears very evident, that the "Inoculation was the Cauſe of his Death?

Firſt we may obſerve, they had very much weakned his Nerves, and depauperated his Blood, by repeated ſweating and purging of him;

him ; the Inoculated Matter was ſtill ſubſiſting in his Blood ; the Effects of which he did not ſo much feel while the Pores were kept open by ſtrong Cordials and breathing Sweats ; but as ſoon as he went abroad to take the Air, then his Pains made a quick Return upon him. And being weakned ſo much by their repeated Experiments ; upon the firſt Return of his Fever, Nature, not being able to bear any more Attacks, ſurrender'd up his Life as a Sacrifice to this *ſevere Tryal.* It is reaſonable to ſuppoſe, that this Nervoſe Malignant Fever, which was ſo violent and deſtructive to this Gentleman, was rais'd to that deadly height, by the *corroſive Matter* they had forc'd into his Blood by *Inoculation.*

The late Ingenious Mr. *Addiſon* has obſerved, that the Fear of Death often proves Mortal, and ſets People on Methods to ſave their Lives, which infallibly deſtroy them. And this may be applied to thoſe who enter upon this *ſevere Method* to avoid an imaginary Danger, and throw themſelves into the Arms of Death, by endeavouring to eſcape it. This Practice (from their own Accounts) is we ſee, attended with dangerous Conſequences, as well as uncertain Effects ; and the attempting to bring upon our ſelves a Diſeaſe of the moſt loathſome kind, is as great an Affront as can be offered to the Dignity of our Natures. *To make uſe* (as the *Inoculators* obſerve) *of the moſt likely means to preſerve Life,*

in

in a Time of common Danger, is without doubt greatly our Duty, and what Nature dictates to us: But sure it can never be thought our Duty, or consistent with the Preservation of our Lives, to bring upon ourselves a Distemper (when we are in the Enjoyment of perfect Health) which may destroy us, or ruin our Constitutions; lest we should be afflicted, when we have loaded our Stomachs with too great *Plenty*, or ventured too freely on a generous *Glass*. This shows *Such*, have a great Mistrust of Providence, and discovers a great Meaness and Degeneracy in their Natures, while they dare not commit their Cause to God, *which doth great things and unsearchable; for he maketh sore, and bindeth up: he woundeth, and his hands make whole.*

Had it pleas'd God, that this Gentleman had had the *Small-Pox*, and recover'd, I don't doubt but they would have oblig'd us with a *Certificate* both from the *Nurse* and *Themselves*; that *Francis Bacon*, Esq; *had receiv'd the Small-Pox by Inoculation, and was well recovered; though he laboured under the Disadvantage of a very ill Habit of Body.* But now the Case is alter'd, quoth *Plowden*, the Gentleman is dead, and *Dead Men* tell no Tales; so that there remains nothing to be done, but to cook up a Story, and form some Excuse to justifie their Practice, and amuse the World. This Gentleman, say

they, was very *ſubject to Fevers, had weak Nerves*; and *what happen'd at Cambridge they will ſay nothing* to; ſo that Mr. Profeſſor *Green* and *Dr. Aſhenhurſt* were under a neceſſity of ſetting forth his Caſe: I preſume to avoid any Imputation they might be apprehenſive the Inoculators would throw upon them. Miſs *Rolt* had the *Meaſles* ſometime before, and *Serjeant Amyand*, ſays, *by all Accounts ſhe had a bad Habit of Body*; he had then the greater Reaſon to call in the Aſſiſtance of a Phyſician, but this he oppos'd: I wonder where all theſe Accounts came from, ſince Mrs. *Rolt*, the *Doctors* and *Apothecary* inform us of the contrary. A Third was ſubject to *Humours*. A Fourth was *Leprous*, (why did they then Inoculate ſuch a Habit of Body?) A Fifth had a *Worm-Fever*. A Sixth was breeding her Teeth. But above all one died ſuddenly, (therefore I ſuppoſe ſhe could not die of the *Small-Pox*.) In ſhort, there is not one that has died under theſe *ſevere Trials*, but what they find, ſome Cauſe or other of *Death*, excluſive of the Diſtemper. *It is wonderful, into what Abſurdities, Zeal for an Opinion, will drive a Man*, but ſure it muſt be a wretched Cauſe, when it's Advocates are forc'd to ſuch pitiful Shifts to ſupport it: This makes good what *Shakeſpear* obſerves, *viz.*

Things bad begun make ſtrong themſelves by ill.

Nay,

Nay, so great is their Industry to support this Practice, and show that there can be no Fault in Them, that they have perswaded, the Melancholly Parents to publish a Certificate, *that they are conscious they have done their Duty, in using the most likely Means, to preserve Life in a Time of common Danger.* There are few Persons, that have at any Time been impos'd upon, so ingenuous as to acknowledge, that they were over-reach'd: Self-Love and an Opinion of our own Judgment, being apt to incline us to justifie, what we have done, though never so imprudently done I don't doubt but Mr. *Brooksbank* and his Wife readily publish'd that Certificate, to avoid those Censures which they thought might be cast upon their Conduct.

I don't find in any of those Accounts which I have seen, any Person who suffered One Child to miscarry by this Method, would ever permit Another to fall into their Hands: Which they certainly would have done, were *they conscious they had done their Duty, in using the most likely Means, to preserve Life in a time of common Danger.*

Mrs. *Rolt*, I am inform'd, has other Children whom she intended should have been Inoculated; but I am of Opinion, all that ever they can say of the *Security* of their *Method*, and all their Boastings of its *Infallibility*, will not prevail with that Lady to suffer another Child to undergo their *severe Trials*. And

this ſhall ever be a Reaſon with me, not to come into this Practice; and to ſuſpect, that it is not ſo happy in its Effects as they are pleas'd to repreſent it to us. Becauſe the very Perſons whom they had once engag'd to be Favourers of their Notions, now run counter to their former Thoughts; and behold, with the greateſt Sorrow, the miſerable Effects of an *Opinion* ſo *credulouſly* embrac'd. And I dare appeal for the Truth of this to Mr. *Brooksbank* and his Wife, whether or no they have not rejoyc'd, that the *Inoculation* had no Effect upon their Son, ſince he ſo perfectly recovered of them received in the *Natural Way*; and whether they have not frequently wiſh'd their Daughter had waited the Time of Providence, ſince ſhe died of them by *Inoculation*.

I will now take Notice of the Four Remarks Mr. *Maitland* has made upon Inoculation, from which he would infer, that it is much *ſafer* and *gentler* than the Natural Way.

Firſt, Page 6. *We may be aſſur'd, if the Inoculation takes Place, of the Time when we ſhall have the* Small-Pox; in this, I think he is entirely right: Where is the DIAPHOINUS MAN that will diſpute againſt Demonſtration? for if the *Inoculation* brings on the *Small-Pox*, it muſt be allow'd we know when we ſhall have them.

Secondly, That *we have not the Infection by the inſenſible Particles, which*, he ſays, Dr. Wagſtaffe *owns to be the moſt contagious; or which*

which is near the ſame Thing, convey the Contagion the ſtrongeſt. This is really more and more critical, and as true as that old Proverb, which ſays, *He that is born to be hang'd, will never be drown'd.* For if the *Small-Pox* is brought upon us by the *ſenſible Particles*, it is moſt certain we have them not by the *inſenſible Ones.* But allowing what he alledges againſt *Dr. Wagſtaffe* to be true, that the *inſenſible Particles are the moſt Contagious*; yet it won't follow, that they *convey the Contagion the ſtrongeſt.* For by the *moſt contagious*, I preſume the Doctor means, that the *inſenſible Particles* of the Animal Juices are in their own Natures apt to operate quicker, than groſſer ones, yet the *Contagion* may be as powerfully convey'd to the Blood, by the *ſenſible Particles*, with which they *Inoculate*: for *Galen* obſerves in his Book *de Temperamentis*, † That neither the Venom of a Viper, nor of the Aſp, nor frothy Spittle of a Mad Dog, are alike Miſchievous when they fall upon the Skin, or enter into the Stomach, as when outwardly communicated by a Wound. And ſhould they fall upon the Stomach, * Dr. *Mead* has obſerv'd, they may by the Action of that Part, be turn'd to *Alcalious*, for by the Force of the Fibres, and by the Salival Juices theſe ſaline *Spicula* may be all broken and diſſolved; or if any can paſs into the Inteſtines, the Balſam of the *Bile* will be an *Antidote* for them;

† Lib. 3. C. 3.
* Dr. Mead of Poiſons, P. 23.

there-

therefore tho' I ſhould allow the *inſenſible Particles* are the moſt *Contagious*, yet the *ſenſible Particles* may nevertheleſs *convey the Contagion the ſtrongeſt*.

Thirdly, *We may be ſure, as his Operator is careful, that he is infected by a favourable Kind.* The Purulent Matter may be taken indeed, from one that has a regular diſtinct Sort; but ſtill this is no Argument, why the Perſon inoculated ſhould have a good Kind; for I have ſhown, that according to the State and Temperament of the Blood, ſuch will be the Nature of the *Small-Pox*. The Blood may be compar'd to Matter of a combuſtible Nature, and the *Particles* of the *Small-Pox* to Sparks of Fire; as therefore a ſmall Spark, tho' not the moſt Intenſe in its ſelf, will give Motion to all the reſt, ſo the leaſt *Particle* of the *Small-Pox*, will ſet the whole Maſs of Blood into a violent Ebullition, which perhaps was not at all diſpos'd to fall into this Violence, till put in Motion by Particles of the ſame, tho' of a more rarified Nature. Therefore let the Operator be never ſo careful, we cannot be ſure a favourable Kind will be the Effect of the Inoculation.

Fourthly, *We may be much more ſure of the Diſpoſition of our Fluids, than a Perſon who catches them by Chance, after a Surfeit or a Debauch.* It is not in our Power to make a true Judgment of the Degrees of Heat and Cold, Moiſt and Dry, which are ſo neceſſary for

for the Preſervation of our Being. Mankind is not endu'd with that Fore-ſight, to know the Works *of the Almighty to Perfection* : For tho' we can by Variety of Symptoms perceive when human Nature is oppreſt, yet we are greatly in the Dark, as to that Part of Knowledge, when we come to judge of thoſe Diſeaſes, which ſo ſuddenly deprive us of Life: and many I have known (ſome of which were in the Bloom of Life) ſo ſuddenly taken from us, that there was not Time to make uſe of any Application: Therefore unleſs this could be thoroughly underſtood, the cleareſt Judgment can't inform us when it is proper to put this Method of Inoculation in Practice. And whereas they give out it is not ſafe to Inoculate a Perſon, when he is breeding this Diſtemper; I defie them with all their *Elaborate Skill* and *Infallibility*, to tell me when any one is *certainly* breeding this Diſtemper. And this I am ſure they will find too difficult for the niceſt Judgment to diſcover. Therefore, it is plain to a Demonſtration, that they can't *be more ſure of the Diſpoſition of the Fluids*. But he tells us it is much better to have them by this Method, leſt *they catch them by Chance, after a Surfeit or a Debauch*. That which comes by *Chance* we muſt ſuppoſe comes but ſeldom, and there can few Inſtances be given of Perſons falling into this Diſtemper after a *Debauch*; ſo that this can never be eſteem'd a ſtrong Reaſon why this Method ſhould be ſo univerſally receiv'd

receiv'd. *Dr. Cheyne in his Eſſay of Health and Long Life*, Page 14. recommends the Uſe of a generous Glaſs, and a good Diet in that Time, when Contagious Diſeaſes make their Appearance; "For, *ſays he*, ſo long as "the *Perſpiration* is *ſtrong*, *brisk* and *full*, it "is impoſſible any of thoſe Diſorders (which a poiſon'd Air is capable of producing) "ſhould happen; becauſe the *Force*, of the "*Perſpiratory* Steams outward, is greater "than the *Force* whereby thoſe *noxious* "*Mixtures* enter. Hence it comes to paſs, "that thoſe who are very *ſtrong* and *healthy*, "and thoſe who have *drank ſtrong Liquors* ſo "plentifully, as to have thereby a brisk *Cir-* "*culation* and full *Perſpiration*, ſeldom or "never catch *Cold*. And this is the Reaſon "why *rich Foods*, and *generous Wines*, "moderately us'd, become ſo excellent an "*Antidote* in *Infectious* and *epidemick* Di- "ſtempers; not only as they baniſh *Fear* and "*Terror*, but as they make ſo full and free a "Stream of *Perſpiration*, and maintain ſo ac- "tive and brisk an *Atmoſphere*, as ſuffers no "*noxious Steams* or *Mixtures* in the *Air* to "come within it, but drives and beats off the "Enemy to a Diſtance." Now if Mr. *Maitland will deny thoſe Things, I think it is Folly to reaſon upon this Subject any longer.*

It may, perhaps, be thought ſtepping out of my Way, to make a Remark or two on ſome Obſervations Mr. *Maitland* has made upon Mr.

Mr. *Massey's* Sermon: But as they allude to the Argument before us, I hope my Reader will pardon the Digression. Mr. *Massey* says in his Sermon, Page 20. *That a Law which forbids the Evil, forbids also every thing that has a Tendency to it; therefore all causless and voluntary Mutilations are forbid.* To which Mr. *Maitland* replies, Page 44. *Surgeons cut off Peoples Limbs. Here the Intention hallows the Action, which is in itself expresly forbid.* No doubt but all *causless* Mutilations are forbid; but we may hope when Surgeons cut off Limbs, it is not without sufficient Cause they put that Operation in Practice. *He believes no Surgeon will affirm, that in all Cases, where Limbs are cut off, there is a direct Impossibility to save the Patient's Life otherwise.* As Mr. *Maitland* pretends to be a Surgeon, sure, he will never represent so Honourable a Body of Men, as Destroyers of Mankind. For my own part, whatever his Notions may be, I have that Generous Opinion of the Faculty, to think they will never cut off Limbs, unless their Judgment lead them to believe it *directly impossible* to save the Patient's Life, without that Operation; and tho' it has ever been esteem'd much more Judicious to save One Limb, when in Danger of being cut off, than to cure Twenty that have: Yet we must not forget what *Ovid* observes,

——— Immedicabile vulnus
Ense recidendum; ne pars sincera trahatur.

Again, Page 45. *A Surgeon who cuts a Perſon for the Stone, even if his Patient dies of the Operation, does not think he has committed a mortal Sin, in inflicting a mortal Diſeaſe; and yet the Patient perhaps might have liv'd many Years, and not dy'd of the Diſtemper at laſt.* Was there ever a Perſon cut for the Stone, that had not for ſome time laboured under it's ſevere Tortures, and was very well convinc'd, there were little Hopes of Eaſe left, and leſs Expectations of a Cure? But would not all the World think that Perſon mad, that would be cut for the Stone, leaſt he ſhould have it Forty Years hence, or perhaps not at all? But this Caſe and that of *Inoculation* are no way parallel. For You obſerve, the Perſon to be Inoculated, is to be in perfect Health, and free from all Symptoms which may give the leaſt Suſpicion, that the Diſtemper is coming upon him; whereas thoſe that are cut for the Stone, are too ſenſible of the acute Pains they bear.

He obſerves further, *A Perſon who has not had the* Small-Pox, *may be very juſtly conſidered, as having the Seeds of a mortal Diſtemper within him.* In the common Courſe of Nature, about One in Sixteen die of the *Small-Pox:* How can any Man call that *a Mortal Diſtemper*, when there is ſo great a Diſparity between thoſe that recover, and thoſe that die?

Once more, Page 46. *The Caſe, put it as diſadvantageouſly as poſſible, more reſembles that*

of

of a Perſon who leaps out of a Window for fear of Fire; and ſurely that can never be reckon'd a Miſtruſt of Providence, even if he did it before he was much in Danger: And if being prompted by his too early Fears to take this Courſe, and loſe his Life by the Fall, no Body will arraign him of Self-Murther. I preſume when a Man leaps out of a Window for Fear of Fire, it is at a Time, when the whole Houſe is in Flames about him; ſo that he has no Poſſibility of eſcaping, but by running ſuch a Hazard; or, (which is the ſame thing) the Terrors of his Mind, brought upon him by the Fright, deprive him of judging of any other Way to eſcape, and the ſtrong Impulſe of Nature, for her own Security, puts him upon ſo bold and dangerous an Attempt. But how will this hold with reſpect to *Inoculation?* Why thus: The *Small-Pox* when they are in the Neighbourhood, muſt be compar'd to ſome *Houſe on Fire*, very well; and *Inoculation* to the *Leaping out of a Window.* Did ever any Man leap out of a Window at *Charing-Croſs*, for Fear of a Fire at *Temple-Bar?* If his Fears were ſo great, as to ſuggeſt to Him, that the Flames might at laſt reach Him, he might go out at his Doors inſtead of his Window, and remove to a more diſtant Part. So as to thoſe that are ſtrongly pre-poſſeſs'd with Fears of a malignant Air in the Neighbourhood bringing on the Small-Pox; ſuch have it in their Power to remove to Places not ſo much

infected. But though Inoculation may be compar'd to the Leaping out of the Window, (yet it muſt be obſerv'd, it is leaping into the Flames too, for the Small-Pox is the Fire you are to avoid) and this is leaping out of the *Frying-pan into the Fire*; which inclines me to think, he won't ſtand by this Compariſon. There are many Perſons that never have the Small-Pox; and tho' there may be a ſtrong Probability, ſome time or other that they *may* have them; yet there is even then a great Poſſibility of eſcaping with Life; which is hardly to be expected, if we ſtay in the Houſe ſurrounded with Flames: And when any one has the Small-Pox (by a Calculation I have made in *Stamford*) it is about eighteen to one, that he recovers; whereas He that ſtays in the Houſe till the Flames lay hold of him, has a Million to One againſt him, that he is deſtroyed. *Inoculation* may indeed juſtly be compared to the *Leaping out of a Window*; for by the Violence of the Fall (granting he eſcapes with Life) he that takes the Leap, may be bruis'd, or his Limbs ſo ſhatter'd, as to render Life a Burthen to him; ſo, He that is *Inoculated*, tho' he may recover of the Small-Pox, yet may he, by this Method of Inoculation, bring on other Diſtempers ſo deſtructive of his Conſtitution, as will fill his Days with Sorrow. In theſe Caſes Mr. *Maitland* owns, ſuch an one *may have done an imprudent, tho' not a ſinful Action*. And yet he has

has the Modesty to plead for Inoculation. But still we see He will not give over the Practice: Of such Power and Force is Interest, that it breaks thro' all the Ties, both of Humanity and Religion.

When Dr. *Wagstaffe* attacks him so closely, that he has no room left to make his Retreat, he then pleads hard for a *Truce*. *Cannot*, says he, Page 22, *The learned Physicians, who so zealously oppose it*, (that is Inoculation) *have a little Patience, and Time will clear up many Things in it, which perhaps may be now Doubtful?* Is not this an humble and modest Request? But had he not better have spoke the real Sentiments of his Mind? and said, "Cannot the learned Physicians have Patience "with my Doctrine of Inoculation, till I have "rais'd a *Fortune*, and am become Sir *Charles*? "then let 'em damn both It and Me.

His owning that they are the *learned Physicians who so zealously oppose* Inoculation, is sufficient to convince us, there are many Difficulties, that want clearing up. Sure the considerate Part of the World will believe, that if those Gentlemen, who understand our Constitutions best, had seen the least Reason to think this *Method secure*, they would have recommended this Practice to the World, and not *so zealously oppose it*; which, if *certain of Success*, would have been esteem'd one of the greatest Blessings to Mankind: But whereas Mr. *Maitland* owns, there are *Doubts* still remaining, which

which Time only can clear up, he has by this Acknowledgment caſt the *Shadow* of *Death* upon his *infallible Light*, and deſtroy'd the *Foundations* of his former *Security*.

Another Objection I have to offer againſt this Practice is this: That granting this a more *ſecure* Way, than waiting for the Turn of Nature, by receiving it either from an infected Perſon, or the Impurities of the Air; yet in all Societies ſome Regard muſt be ſhown to the Peace and Intereſt of Mankind. For tho' a great many approve of this *ſevere Method*, yet far greater are the Numbers that do not: So that unleſs we can be made eaſy in this Point, it muſt of neceſſity break the Bond of Peace and good Neighbourhood, and raiſe eternal Heart-burnings and Jealouſies amongſt each other. For as every Perſon at preſent, has a Liberty, *when*, and *where*, he pleaſes to Inoculate, he may bring the Small-Pox into a Town at his Pleaſure: Conſequently, thoſe who do not approve of this Method, if they will not come into this Scheme, muſt be perpetually harraſs'd with the Apprehenſions of receiving the Small-Pox; which will make Life very uneaſy and uncomfortable to them; Won't this make them *renounce all Commerce with their beſt Friends and deareſt Relations? And ſhould they by chance meet an Object that has but lately recovered, how ſuſceptable* will they be *of the Diſtemper? And how few thus ſeiz'd, do ever eſcape?*

escape? Their Fears will not be the only Disadvantage neither; for that Income which is procur'd by the Diligence of the Tradesman for the Subsistance of his Family, will be greatly lessened thereby: For the Trading Part of a Town is ever sensible of the Disadvantage, during the raging of this Calamity: So that if this Method is to be the common Practice in the Country; instead of having the Small-Pox once in Seven or Eight Years, (which is about the Time I have observ'd it usually returns,) we must have the Affliction *always* at our Doors, both to the Terror of our Minds, and the Destruction of our Bodies and Fortunes.

When this *Method* was first brought amongst us, they told us, it might be practic'd upon Persons in all Seasons, and of all Ages; but now they have alter'd their Thoughts, and Children are esteem'd the propereſt Subjects: And in those the Danger in *Infection* too less hazardous, therefore we have the less Reason to Inoculate Them. For we must consider, that Their Vessels are not so easily obstructed, as Those of Persons, who are advanc'd to the Bloom of Life; and whose Lives perhaps have not been so Regular, and by consequence their Fluids not so Pure: Their *Lympha*, *Stomach*, and *Intestines*, are not loaded with those Crudities, which the *Debauches*, high *Feeding*, and *Intemperance*, form and heap up in Persons of an advanc'd

Age

Age: Their Blood is more *attenuated* and more *aqueous*, and consequently less subject to form Obstructions; and it is less impregnated with *Saline* Particles, therefore the *Fermentation* will be the less Violent in this Disease, when it comes: Their *Perspirations* are much more free, so that all the *Secretions* will be perform'd with far less difficulty: Add to all this, Their Minds are not so capable of being mov'd by Apprehensions of Danger; and so their Passions being at rest, Nature is left to discharge the *morbific Matter* without being clog'd with a thousand additional Dangers. Mr. *Massey* the Apothecary takes Notice, that *of several Hundreds of Children in* Christ's Hospital, *which have had the* Small-Pox, *none has dy'd within the Space of eight Years but one.* This Observation Mr. *Maitland* triumphs in, *Page* 37, and says, this *is very near to a practical Demonstration* of the Safety of the Practice which he has advanc'd. So that I expect he will reply to me, since Children have all these Advantages from Nature, as well as those of *Preparation*, and *Regimen*, it ought to encourage us the more to let Them be Inoculated. But we must consider, that there is not one Person in twenty, but what have the *Small-Pox* in their Childhood; and, if what you observe be true, *Page* 17, viz. *That however more favourable the natural* Small-Pox *generally is to Children than grown Persons, yet Inoculation has been attended with*

better

better Succeſs in the latter than in the former; it is plain from your own Words, that Inoculation is more *dangerous* to *Children*, but the *inſenſible Particles* to *grown Perſons*; ſo that I hope there can no Reaſon be given why the tender Natures of Children ſhou'd be ſo violently oppreſt.

But as You and Mr. *Maitland* ſo much inſiſt on the Advantage the Inoculated have by their Bodies being prepar'd, and every one that is a Favourer of the Practice, lays ſo great a Streſs upon it; it is become neceſſary to conſider the Nature, and Effects of your grand Preparations, which are *Purging* and *Bleeding*. But we ſhall find this is mere Farce, and intended more to amuſe than profit Mankind. For by *Purging* you propoſe to throw off *ſomewhat* that is Prejudicial, or elſe why do you *Purge*? But you lay it down as a Rule, Page 12. *To inoculate none but Perſons of a good Habit of Body, and free not only from any apparent, but, as far as can be judg'd, from any latent Diſeaſe*: Now if only ſuch are to be inoculated, where is the neceſſity of *Purging*; and therefore why ſuch a Stir about *preparing* the Body? we don't know When or Where the Patient is afflicted, otherwiſe than by Symptoms; and if none of thoſe offer themſelves, we may hope the Body is in a healthful State. *Hippocrates* ſays in his 22*d Aphoriſm*, *we ought only to purge off the Humours that are concocted, and not thoſe that are yet crude*; and if the Perſon, who

has Thoughts of being inoculated, is of such a Habit of Body as to require these Preparations, then by your own Account he is not a fit Subject for Inoculation. The Preparation by *Bleeding* will be found still less necessary; because by it the Crasis of the Blood may be so weaken'd, as to render it incapable of throwing off that Corrosive Matter the Inoculators force into it. Bleeding has frequently been known to retard the Eruption, which has been found fatal, particularly to one of *Royal*, and another of *Noble Blood*: I mean the *Duke* of *Glouceſter* and the *Marquis* of *Blandford*; both which were blooded before the *Small-Pox* made their Appearance; and it was the Opinion of the Immortal *Radcliffe* (when he was call'd to their Assistance) that this Preparation had so weaken'd their Blood and Spirits, as to render all the Endeavours which were made use of Ineffectual I would not be understood, as if by this, I am wholly condemning the Practice of Bleeding in the *Small-Pox*: No, I am of Opinion it is often found very *necessary*, and very *successful*: But I believe all Persons of the Profession will allow, it is much easier to judge of the Necessity of Bleeding, when a Person is in a violent Fever, and the Blood boils high, than when Nature is performing her proper Offices, and the whole Fabrick of Man is undisturb'd.

The Death *of the Honourable* William Spencer, *Son of the Right Honourable the late Earl of* Sunderland; gave their Scheme such a Shock,

Shock, that their greateſt Induſtry was employ'd to recover the Reputation it had loſt. The firſt Step they took was to *examin the Body*; and then they pompouſly dreſt out a Certificate, in order to prove that the Child died either of a *Polipus*, or a *Water* in the *Head*. The Certificate runs thus: "We "found the *Small-Pox* of a mix'd Sort, diſtinct "in ſome Parts, and confluent in others; "almoſt dry'd and ſcal'd throughout the Bo- "dy: All the Inward Parts were in their "natural State, and free from any Mark of "the *Small-Pox*. In the Right Ventricle of "the *Heart* there were two Polypus's, where- "of one was branch'd out into the *Arteria* "*Pulmonalis*. In the Head, we found the "Surface of the Brain full of Water, and the "Subſtance of it flabby; the Ventricles of it "being as full of Water as they could hold; "the *Plexus Choroides* being white, by ſoak- "ing in that Water: The *Baſis* of the *Brain* "was alſo full of Water. In the *Longitudi-* "*nal Sinus*, there was a long and pretty "large *Polypus*; and likewiſe one in the *La-* "*teral Sinus*. The *Cerebellum* was in its natu- "ral State.

April 22. 1722. Sign'd thus,
Claudius Amyand,
Iſaac Garnier, } Apothe-
Thomas Garnier, } car.
John Reilliez,
John Dolignon.

By this Certificate no one could imagine this Child died of the *Small-Pox*; do they not therefore, by publiſhing it, propoſe to prevent us from ſearching after Truth? The Perſons that have ſign'd it, I dare ſay, know too well the Nature of Poiſons to believe the the *Polypus*, or the *Baſis* and *Surface of the Brain being full of Water*, was the principal Cauſe of the Child's Death, but that thoſe Symptoms ought to be reckon'd among the Effects of the *ingrafted Poiſon*. Thus *Baglivi* obſerves, Page 385. 386. "A live Rabbit "being ſtung in the Upper-Lip in two Places "by a *Tarantula*, it died in five Days after. "When the Body was open'd the Brain was "inflam'd, and ſet about with blackiſh Spots. "In the *Ventricles* of the Heart were obſerv'd "ſmall Branches of a Polypous Concretion; "there was abundance of Serum lying about "the outward Parts of the Brain. The "other Parts were all ſound and untainted." It was never yet diſputed, but that the ſtinging of the *Tarantula* was the Cauſe of the Rabbit's Death, tho' there was found in the Heart a *Polypous Concretion, and abundance of Water about the Brain*. Neither can any one that has a Deſire that Truth ſhould appear, ſeek for any other Cauſe of Death in this Child, but the Small-Pox; tho' perhaps thoſe who muſt gloſs over a *bad Cauſe*, aud have *private Views* to promote, may be ingenious enough to find out a different Reaſon.

There

There are five Persons sign'd the Certificate, and not one Physician amongst them. At my first reading it I thought this very extraordinary, that the *Son* of the *Right Honourable the late Earl of* Sunderland, shou'd not have one Physician to attend him, or if he had, that none of those Gentlemen should likewise sign the Certificate. But I have been inform'd, from a most undeniable Authority, that after this Child's Death, Mr. *Amyand drew up a Paper, in which he affirms the Child died of a Water in the Head, and not of the* Small-Pox, *and went from a great Person, to three of the most Eminent Physicians in Town to sign it, but they none of them did.* When this or any other of my Accounts are call'd in question, I shall be ready to produce my Vouchers. Why the Physicians refus'd to sign it I wont presume to say, but I think it is so plain of it self, that I need say no more of it. Had the Inoculators dealt as fairly with us, as they propos'd, they would never have put out this *Certificate*; nor Mr. *Degrave* told us in his Letter, his Daughter's Small-Pox was the Effect of the Inoculation, after the Matter had lain in her Blood Eleven Weeks. This Mr. *Maitland* allows of, tho' he says, Page 24. The Man *in* St. Thomas's Hospital, *whom he visited, on the sixth Day after the Operation, had no Eruptions, and he saw him a Week after, but still no Eruptions; if any Eruptions happen'd between these*

Times

Times, they could not be the Small-Pox : Now let any one judge of the Honour of thoſe People; in one Caſe it may lie *Eleven Weeks* and produce the Small-Pox, but when a different Turn is to be ſerv'd, it can't lie *Thirteen Days.*

When Mr. *Maitland* has a Deſire to prevail with People to ſuffer Themſelves, or Children to be Inoculated, then we are told, nothing can be more *ſafe* or *eaſy than this Method; that it is never attended with any of thoſe Diſorders, which always accompany the* Small-Pox *in the Natural Way;* and that the Concluſion is always *Salutary.* But when he has another Point to carry, viz. to prove, that they are really the true Kind, and therefore thoſe, that are once Inoculated, cannot be ſubject to have them a ſecond Time; then *One had a thouſand, and Another had two Thouſand,* Page 30. And Mr. *Heath's* Son for Inſtance, Page 27. had by Inoculation *a great Load of the continued Small Kind, but at laſt recover'd and did well tho' he was always eating and filling his Belly with fat Country-pudding*: By this Inoculator's writing, I am perſuaded he has indulg'd too much in that Diet; and yet under this Diſadvantage, he is ſuch an Adept in this Diſtemper, that he ſays, *inſomuch that had he taken the* Small-Pox *by Infection, the World* (and Mr. Maitland) *could not have ſav'd his Life. Further, to evince the Power of Infection, and the Genuineſs of the Inoculated* Small-Pox;

Page

Page 26. six of Mr. Batt's *Servants were all seiz'd with the* natural Small-Pox *of different Kinds, and catch'd them from this Child that was Inoculated, which had not above twenty: But they all (God be thank'd) did well, (except one Maid that dy'd.)* Here he fairly owns that the Infection, received from an Inoculated Person, is impregnated with as great a Malignity, as that which is receiv'd from One ill in the natural Way; sure then he will allow, the Blood must be as much affected with the morbific Matter, and the Person then equally in Danger.

Should Mr. *Maitland*, out of his great Zeal for the Publick Good, take it into his Head to come to his old Habitation in *Stamford*, where (not long since) the Small-Pox rag'd for above two Years, and tell his Acquaintance in the following Speech the wonderful Success of this Method; I believe there are but few that would either approve of his Practice, or believe what he so positively asserts.

GENTLEMEN,

HAving understood, since my Retirement into Foreign Parts, *that I have been pretty much talk'd of; and finding withal, that the Reports of my* Experiments *are various and oftentimes contradictory: I thought it became me, to give* my old Friends *an honest Account* of this *severe* Operation.

Is it not a Matter of the greatest Importance to us, to know how to prevent the mighty Contagion of the Small-

Small-Pox? *it is a Diſtemper of the moſt fatal and deſtructive Kind*; but the Method (*tho' new indeed*) *which I now make publick out of a ſingle View of doing good, is certain to relieve Mankind, from the fatal Effects, of that very loathſome and malignant Diſeaſe; which extingniſhes great Families, as by the Plague; and their Titles and Eſtates thereby tranſmitted to Strangers: What would not tender Parents give to ſecure to them the Lives and Features of their beloved Offspring; when they behold them diſfigured by the loathſome Diſeaſe, and ſtruggling with the Pangs of Death? And if they have the good Fortune to eſcape with their Lives, what an ugly Change from what they were before? What Pittings, Seams, and Scars in their Faces? What Films and Fiſtulas, and ſometimes Blindneſs in their* * *Eyes*? *What Ulcers, and Impoſthumes in their Bodies; Contractions of the Nerves, and even Lameneſs for Life*? *But this my ſtrange Method of Inoculation is alwas Salutary, and attended with very ſlight and gentle Diſorders, having none of the uſual Complaints,* † *which attend the Natural Way. The Eruptions* ** *too are few from Ten to a Hundred. This Practice ends always Salutary,* †† *eſpecially to Perſons of the firſt Rank and Quality,* (who can pay me beſt.) *So that I cannot forbear admiring the very great Sagacity of the Men who firſt invented this Method; and the laudible and diligent Obſervations of them too, who ſo carefully practis'd it themſelves, and ſo faithfully convey'd it to their Neigh-*

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* I never was ſenſible a Perſon could be Blind any where elſe, except in his Underſtanding.

† Witneſs Miſs Rolt, and Mr. Heath's Son, both exceeding ill before the Eruption.

** Witneſs Mr. Hugh's Daughter, Mary Waller, and Lord Bathurſt's Servant, all extreamly full.

†† Witneſs the Honourable Mr William Spencer, who died of them. See theſe Remarks in Dr. Jurin's Account of the Succeſs of Inoculating the Small-Pox, Page 18. 20, 26. And Mr. Maitland's Account of Inoculating the Small-Pox, Page 27, 30.

bours;

bours: They all indeed were ſenſible of the Benefit, and found (as I have done) *Their Account in it. Hence, if any Regard be due to Facts, and to the moſt certain Obſervation and Experience of others; (which, in Matters of Practice, have ever been counted the beſt and ſureſt Direction) I am perſwaded, all Impartial People will allow this Method to be not only ſafe, but uſeful; and highly worthy to be receiv'd with Eſteem and Applauſe. True indeed, were the Operation in itſelf dangerous; I ſhould be ready to own the Charge of Unlawfulneſs: But pray, what are they afraid of* * *? Is there any Thing here frightful, or ſhocking to the niceſt and moſt delicate? So that I may truly venture to affirm, that the Method I have recommended, is, of all Others hitherto known, the ſafeſt; and I am ſure far more Infallible, than that of the moſt learned and moſt cautious Practice.*

This is the Sum of what he advances in favour of Inoculation; and theſe are his own Words, and no unnatural or forc'd Conſtruction put upon them: Now let any one judge, whether there can be any *publick Good* or *general Safety* from this Method. He ſays, Page 15. It is *to preſerve Life, not to give a Diſeaſe.* Does he propoſe to bring on the *Small-Pox*, and not *give a Diſeaſe*, and to *preſerve Life*, by taking it away? For this has been fatally experienc'd. When a Man has already deſtroy'd Some, and daily hazards the Lives of Others, and yet can talk of an *Infallible Security* from this Method: This I think is a groſſer Aſſurance than what the moſt *Celebrated Empiric* ever offer'd from the Stage.

* Meeting with Miſs Rolt's Caſe.

But if this *Pagan Practice* must be a Pattern for *Christians* to copy after, I hope (for the Security of Those who cannot come into this way of thinking) the Legislature will, out of their wonted Benevolence to Mankind, order that an Infirmary shall be built in some Part distant from the Town; where Persons, who have this strong Desire of making Experiments upon Themselves, may resort to, and thereby prevent those Inconveniences, which may otherwise fall upon their Neighbours: That they may not *draw the Bow at a venture*, and like the Mad-man *Solomon* speaks of, *cast Firebrands, Arrows and Death.*

Mr. *Maitland* taxes Dr. *Wagstaffe*, Page 28, with having a *partial Credulity*, and instances in the *Story* of Capt. *Hussart*; *It requires only a bare Reading*, he says, *to make it ridiculous: For no unprejudic'd Person of common Sense will believe, that one, after having been Inoculated twice without any Effect, would try it a third Time.* I verily believe, he has no Design to expose so great a Friend to this Practice, as Dr. *Offley* is: But if the Captain must lie under his Displeasure, and be look'd on as a Person not endued with common Sense; the Dr. I am afraid, must by the same Argument, appear very light in the Ballance; for the Dr. owns he Inoculated *Francis Bacon*, Esq; twice: But perhaps this experienced Author may be so Critical, as to have observ'd that the Experiment may be made consistently with Discretion *twice*, but the *third Time* shows you

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are a Fool: Indeed in my Judgment, the Folly comes with the *first* Tryal; but it will admit of a much harder Name the *Second*.

As Mr. *Maitland* has been so free with the Character of Capt. *Hussart*, and represented Dr. *Wagstaffe* as a Person *credulous* in believing Accounts, which *a bare Reading is sufficient to make ridiculous*; I could little have thought, He could be guilty of the same Presumption, which he has represented as *passing all Degrees of Credibility*. And yet the following Account shows he has fall'n into the same *Folly*, he so freely condemns in another. "Last Winter before *Christmas*, Mr. "*Maitland* perform'd Inoculation upon a Son "of Mr. *Mann's*, a young Man of the Age of "21, of a brisk healthful Constitution, who "was hardly ever troubled with a Day's Ill-"ness before. The first Operation was try'd "to no purpose, and in about seven Day's "Time, the Incisions were almost dry'd up; "when they expected an Inflammation, and "the Eruption. He then apply'd *fresh Matter*, "but with no farther Success than the other: "In two or three Day's Time, he again *re-"new'd* the *Matter*, which had no more Ef-"fect, or made Alteration upon him, than "the *two former*; any farther than what a "thin spare Diet, and Confinement, might "occasion. He was purg'd two or three times, "and in three Weeks-time from the begin-"ing, was releas'd from his Room, and went "abroad. In about two Months after that,

" he complain'd of violent Gripings and Cho-
" lick, with little or no Stools; upon which
" he was advis'd to go to *Briſtol* to drink the
" Waters, and there went through a Courſe
" of Phyſick, where he ſtay'd full 6 Weeks;
" ſince which Time he has been troubled
" with the aforeſaid Indiſpoſition, more ſe-
" verely than ever. He is now at *Chelſea*, un-
" der the Care of two eminent Phyſicians,
" who encourage him to believe, he is reco-
" vered of the Conſumptive Habit they were
" apprehenſive of. But his Gripings have been
" ſo violent within this Week, as to cauſe
" Convulſions, without any Paſſage for three
" Days.

" The Father of this Gentleman being out
" of Town, his Brother gave me the Account,
" which I wrote down as he related it.

London, Sept. 22, 1724. J. DEATH.

What I would farther obſerve from this Account is, that this Method brought on an ill Habit of Body, nor is it the only Caſe, where it has done ſo; for *Francis Bacon*, Eſq; ſome ſmall time before he died, (told a Reverend Divine, from whom I had it) that he had never been well from the Time he was Inoculated; and I have very good Reaſon to believe, what is publiſhed in your Account, is the *Truth*, yet that it is far from the *whole Truth*; and though Mr. *Degrave* poſitively aſſerts in Mr. *Maitland's* Book, Page 53, That his Daughter *got well*

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in eight Days from the first Eruption; and Mr. *Maitland* backs this Account, Page 27. by saying *what Dr. Wagstaffe says of his Fears of a great Class of Hypothetical Diseases, is all vanished, and the Girl is very well.* Notwithstanding they assert this, yet I have this Favour to beg of Mr. *Degrave* and Mr. *Maitland*; to lay their Hands upon their Hearts, and inform me *bona fide*, Whether *She* has not been in a *worse* State of Health *since* She was Inoculated than *before*? Whether the *Arm* in which She was Inoculated, is not *withered*? And lastly, Whether there is not a *watry Ichor* continually discharging from it? When they are pleased to answer these few plain Questions, they may perhaps know the Reasons why I ask them. Therefore, though *he thinks it is hard to charge the common Accidents of the* Small-Pox *in general, upon this Method in Particular*; yet as This Method more frequently produces *Accidents* of this Nature, than the Natural Way; I am sure *he cannot, nay, will not be offended*, if we lay their Cause at the Door of Inoculation. It is not very long since, that a young Lady was inoculated, who was the Only Daughter of a Gentleman of Great Fortune at *Salisbury*; and notwithstanding the *Security* of their Method, and *the perfect Safety of this Practice, especially to* **Persons of the First Rank*, she fell a Sacrifice to their *severe Tryals.*

* Vide Mr. Maitland's Account, Page 8.

Mr.

Mr. *Bell* of *Bedford*, who had a Son inoculated, " Tho' he had, (as Himself informs me by a Letter) " a Regular and Distinct " Sort as ever was seen in the Natural Way, " (and not more than 400 in all) yet He Sa- " livated very much; they turn'd, upon the " the 9th Day after their Appearance, and " then ensu'd several Tumours, particularly " a large One under his Right Arm, which dis- " charged a great Quantity of Matter. A large " Flux of Humors fell down into both his " Arms, where the Incisions were made, " which was of great Service to him". But how few Constitutions are there, that could bear up under so large a Discharge? For had this happened to a weaker Habit of Body, there would have been Reason to fear a *Jaundice*, *Dropsie*, or *Consumption* might have ensu'd. But granting they may escape all these Distempers, Is there not Reason to fear these Tumours may sometimes form themselves in the Face? (for no Mortal can say where they may fix) And should this happen, † *What would not tender Parents give to secure to them the Features of their beloved Offspring, when they behold them disfigured by the loathsome Disease? What Films and Fistula's, What Ulcers and Impostbumes? And if they have the good Fortune to escape with their Lives, what an ugly Change from what they were before?*

In short then, to prevent all these, and many

† Vide Mr. Maitland's Account, Page 13.

the

the like Calamities, the almoſt univerſal and inevitable Conſequences of this fatal Diſeaſe, I may truly venture to affirm, that the beſt Method, is to truſt Providence, and not ſuffer Mortal Man to inflict Diſeaſes upon us at his Pleaſure.

I wiſh it had been as much in my Power as it is in my Inclinations, to have ſet this Controverſy in a ſtill clearer Light; which I could have done, had ſeveral Perſons had as much Honour to acknowledge the *Misfortunes* they ſuffered to be brought upon them by this Practice, as Others have been ready to Certifie the *Succeſs* of the Method. But while I am ſo juſtly condemning Thoſe, who are unwilling to let Truth appear; I beg leave to make uſe of this Opportunity of returning my Thanks to the Honourable Mrs. *Rolt*, and paying Her thoſe Acknowledgments, which are ſo juſtly due to Her from the World, and my ſelf, for the generous Declaration She has made of the *Miſerable* Effects this Practice brought upon the young Lady her Daughter.

I will now beg leave to make an Obſervation or two on what you have laid before the World,

Firſt you obſerve, Page 17. A wide Difference between the *Natural Small-Pox*, and this New Way of *Inoculation*: The *Natural Small-Pox* being generally moſt favourable to *Children*, but *Inoculation* to *grown Perſons* If ſo, *grown Perſons*, who are ſo ſeverely handled by *Nature*, and ſo favourably by

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Art, ſhould of all Perſons be the propereſt Subjects for *Inoculation*. But alaſs! this Method is likely to be of leaſt Service to thoſe who moſt want its Aſſiſtance; ſince it plainly appears by your own *Calculation*, that if a *grown Perſon* be Inoculated, 'tis little more than 5 to 1 he has the *Small-Pox* by that Operation. This you obſerve in your Table; 62 Perſons were Inoculated, whoſe Ages were between 20 to 52, 9 of Thoſe had no *Small-Pox*, and 3 had an *imperfect Sort*, (which perhaps might be more like the Itch or Leproſie than the Small-Pox) Now if we throw out all who had the *Imperfect Sort*, the Account ſtands thus, 62: 9:: 7: 1. nearly; but if we take them in, (as I ſee no Reaſon why not) then the Account is thus, 62: 12:: 5: 1. nearly; that is, taking the neareſt whole Number. From whence it appears, that One in Five of *grown* Perſons never have the *Small-Pox* by *Inoculation*: But tho' they may miſs having the *Small-Pox*, (yet by the Three who had ſome other Diſorder brought upon them) it is plain, we may be afflicted with other Diſeaſes. It therefore can never be adviſable to recommend this Practice, if we conſider further, that He that catches them by *Infection*, has a Chance of about Eighteen to One that he recovers, and of having them every way as Favourable, as he that has them by *Inoculation*, without any of the Inconveniences, of either having the moſt fatal or fouleſt Diſtempers forc'd into his Blood: But if we add the

Chance

Chance of never having them at all, the Advantage is greatly on the ſide of the *Natural Sort*. For, when the poiſonous Matter is abſorb'd into the Veins, and circulates with the Blood; the Effect is proportionable to the Temperature of the Blood, which receives, and not to the Quality of the *Matter* receiv'd; and this we ſee is *infinite*, from the utmoſt *Virulence*, thro' the ſeveral intermediate Stages, to a total Evaneſcence or no Effect at all. Now if the *Blood* be in an *improper State* to receive this *Poiſon* (which no Phyſician can divine) is it likely this *Virulent Matter*, which generally ſpeaking, is capable of raiſing ſuch violent Diſorders in the human Frame (becauſe the Blood is often too weak to expel the Enemy) ſhould be intirely diſarm'd, and looſe its poiſonous Quality? Or is it not more probable, that its *Eſſence* is not alter'd; that it ſtill lurks dangerouſly in the Blood; and may, at any Diſtance of Time, (according to the Strength of the Patient) break out into *Putrid* or *Nervoſe Fevers*; as has been obſerv'd in the Caſe of *Francis Bacon*, Eſq; Page 24. or produce more *ſilent*, tho' not leſs *fatal Effects*, in *Hecticks*, and all manner of *Nervoſe Diſorders*? Or, granting the Blood be ſtrong enough to expel the malignant Matter, yet if it be too *Sharp* or *Corroſive*, we probably ſhall have the *Cryſtalline Sort*, as you take Notice, Page 34. or the *Confluent Sort*, as you obſerve, Page 20.

Secondly, You obſerve Page 13, That the *Operator* muſt with *a warm Hand* convey the Matter from the Infected *to the Patient which is to be Inoculated.* From this a very great Inconvenience may ariſe: For as the *Operator* is to go ſo *immediately* from the *Sick* to the *Well*, it is reaſonable to ſuppoſe the *Patient* may at the ſame Time when he is Inoculated, receive the Diſtemper by the *inſenſible Particles* alſo; and how dangerous that would be, the Inoculators alledging this, as an Excuſe why Lord *Bathurſt*'s Servant miſcarry'd, is ſufficient to convince us.

Thirdly, You are pleas'd to caution us, Page 12. Of the *great Care which ought to be taken to Inoculate none but Perſons of a good Habit of Body, and free, not only from any apparent, but, as far as can be judg'd, from any latent Diſeaſe.* Here I muſt obſerve (as I hope every impartial Reader will) what a mighty Streſs is laid upon this, *viz.* that none but Thoſe of a good Conſtitution, and ſound Habit of Body, ſuch as have no bad Humours, either inherent or acquir'd to ſtrugle with, (which frequently render the *Small-Pox* ſo dangerous) ſhould undergo this Operation.

This Method, with the obſerving theſe Cautions, I own bids faireſt for the Succeſs of this New Project; but at the ſame Time, as it makes the *Well Sick*, and *Wounds* Thoſe that are *Whole*, it deſtroys the Benefit and Uſefulneſs they would perſuade us ariſes from It.

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The *Small-Pox* in the *Natural Way* very rarely affects Life, where the Habit of Body and Conſtitution are good; and this can eaſily be prov'd from a much longer Obſervation, and more numerous Inſtances, than the Inoculators are able to give us from their Scheme: I would then know, where lyes the Advantage of conveying a Diſtemper by Force, into a ſound healthful Body, whoſe good Conſtitution might perhaps preſerve it *from* Infection in the *Natural Way*, or at leaſt can hardly (with good Management) fail to preſerve it *in* this Diſtemper, when ever Nature, (without this *Artificial Violence*) inclines them to it?

But by this Rule of Inoculating only Thoſe who are of the beſt Conſtitutions, you propoſe only to preſerve Such, whom in a *Natural Way*, an ignorant Greek Woman can ſcarcely deſtroy.

Thus, Sir, you have taken away the Univerſal Benefit from this Method, which the Inoculators in their great *Modeſty*, us'd to flatter and amuſe Mankind withal, and obligingly ſav'd me the Trouble of confuting their falſe Aſſertions.

For if Perſons of *bad* Conſtitutions be excluded, along with thoſe of *weak* ones, (as confeſs'dly they are by this Precaution,) I am perſwaded, far the greateſt Part of the *Engliſh* Nation, (and eſpecially thoſe of the better Sort) cannot enjoy the Benefit of it: For, Perſons whoſe Fortunes raiſe them above the common Standard, are too apt to fall in with the Faſhion

of the Times, and indulge their Pallates with ſtrong Wines, and Food toſs'd up with high Sauces, rather than content themſelves with a plain and ſimple Diet, which is much more nouriſhing, and leſs ſubject to inflame the Blood. So that according to this Poſition, there are infinitely more *improper* than *fit* Subjects for Inoculation.

I would now beg leave to ask theſe *learned Mimics*, of a few ignorant *Greek Women*, two Queſtions.

Firſt, Whether Inoculation, is not in their Opinion the moſt *gentle* and *ſafe* Manner of having the *Small-Pox?*

And ſecondly, Whether a Perſon of a *weak Conſtitution*, or *a bad Habit of Body*, be not as liable, if not more ſo, to receive the *Small-Pox* by Infection as the moſt *healthful* can be?

The former Queſtion, they will, I am ſure, anſwer me in the Affirmative; and the latter, I am confident they will not deny, or if they ſhould, Demonſtration would be againſt them.

Now what I (and every one of common Senſe) muſt infer from hence, is this, That if the Method of Inoculation is ſo much *gentler* and *ſafer* than the Natural Way, methinks *bad Conſtitutions* ſhould be the moſt *proper Subjects* for their wonderful Skill. For ſince *weak* and *bad Conſtitutions* are in as much, if not more Danger of having the *Small-Pox* the Natural Way than *good Ones*, it were better ſure to have them by the *ſafe* and *eaſy Method* of Inoculation, than with the *greater Danger* and *Violence*,

Violence, which those Gentlemen affirm always attend the having them by *Infection*. And tho' *Inoculation* with all it's Infallibility, may affect the *Weak* and *Infirm*, more than the *Strong* and *Sound*, yet if it be in it's self a more *gentle* and *safe Method* than what comes the *Natural Way*, it must by Parity of Reason affect the same Subject in a *less Degree*, and therefore ought rather to be chosen: For if this Rule be true, sure a *weak Constitution* and *ill Habit of Body*, can better undergo this Disease in a *gentle Degree*, than with *Violence*; and is better able to support *moderate Symptoms* and a *few*, than *severe Ones* and great *Numbers*.

The Result of the Argument in short must be this; If the Method of Inoculation be *gentler* and *safer*, *weak Persons* ought of all Others to be Inoculated, as less able to bear the more hazardous Effects of Infection.

If it is not *safer* and *easier* than the Natural Way, the whole Scheme falls to the Ground; for then it is plain it is a greater Hazard even to the *Strong* to undergo this Method, and the *Weak* are altogether incapable of it. Which obliges me to Remark, that their not caring to make this Experiment *now*, upon any but *strong* and *healthful* Persons, is a plain Proof that Themselves are doubtful of the safety of their own Remedy, and think Nature less able to resist *Their* Method than *Her* own; or else such *Benevolent Persons*, would sooner Inoculate *weak* People, did not they think the Attacks made by Inoculation, more

violent

violent and *dangerous*, than those of *Infection*; otherwise these Gentlemen must appear very inconsistent with themselves, and that *Humanity* and *Compassion* they pretend to possess in so exalted a Degree, and which they would perswade the World, is the *only Motive* induces them to promote and recommend this Method. But if this *New Practice*, should be prov'd more dangerous than the *Natural Way*, as themselves by the afore-mention'd Caution tacitly own, (and I hope I have abundantly shown) sure there cannot want any more Arguments to perswade the World to join with me, in that most *Rational*, as well as *Religious* Determination of the Royal Prophet: *Let us fall into the Hand of the Lord, (for his Mercies are great) and let me not fall into the Hand of Man.*

And now *let the warm* Promoters *of Inoculation lay their Hands upon their Hearts, and consider, whether the* destroying *so many Lives* be agreeable with *any Precept of Law or Gospel. We have been told, indeed,* that this Practice came from Turkey, and that it has always a happy and gentle Effect: *But if it prove thus,* prejudicial and unsafe *to Mankind, I, for my Part, shall make no Scruple of ascribing it,* to the Assurance of the first Promoter; *and undoubtedly, all sober and thinking Persons will judge, and believe, that the making known to the World a Method of* taking away *our Lives by one of the most terrible Diseases in Nature, can be owing to nothing but the* Boldness of the Author

Author, who is determin'd to ſupport his Practice at any rate.

I am now willing to leave it to our *Inoculators* to judge, whether the Method they make uſe of, (ſuppoſing it is with an Intention *to preſerve Life*) may not raiſe Tumults and Diſorders in our Blood of worſe Conſequence than the *Natural Small-Pox?* Or at leaſt (as Dr. *Mead* has ingeniouſly expreſs'd it) " * by " clogging the Wheels, and throwing Duſt " upon the Springs of the fineſt Machine in " the Creation, do check and interrupt the " Action of Nature, when 'tis imploy'd about " the moſt *Nice* and *Critical* Work.

Therefore I hope what has been hitherto advanc'd, will not ſuffer us to think; the ALL-WISE *and* GREAT GOD *did out of his kind and tender Providence* diſcover this ſevere and uncertain Method to us.

But I forbear to purſue theſe Thoughts any farther, leſt I fall upon a Subject, which more properly belongs to the Reverend the Clergy to maintain: I mean, what Power we have to do Violence to our Natures: For how far this is conſiſtent with the Precepts of the Goſpel; Thoſe who are to watch for our Souls, can beſt determine, and will no doubt give us Satisfaction, ſince it is now become ſo juſtly a Matter of Enquiry.

I had not given you the Trouble of this long Letter, had you not been pleas'd to lay

* Vide Dr. Mead of Poiſons, Page 166.

before

before us *The Account of the Succeſs of Inoculating the* Small-Pox, and given it as your Opinion, Page 3. That this *Controverſy principally turns upon the two following Points.*

1. *Whether the Diſtemper given by Inoculation be an effectual Security to the Patient, againſt his having the* Small-Pox *afterwards in the natural Way?*
2. *Whether the Hazard of Inoculation be conſiderably leſs than that of* the natural Small-Pox?

The firſt Point cannot yet be anſwer'd, we not having had Time ſufficient to ſatisfie us in this Particular.

But the Second, I preſume, I have prov'd, both from Your own as well as Other Accounts, *viz*, That the *Hazard of Inoculation* is not only not *conſiderably leſs*, but *conſiderably greater than that of the* natural Small-Pox. I hope therefore there will now *be an End of this Diſpute, at leaſt among Phyſicians.* And ſince this Point is ſo *fairly determin'd in the Negative, the Practice of Inoculation muſt on all Hands be given up.* And I don't doubt but I ſhall have the Honour of your Thoughts, concurring with Thoſe of,

SIR,

Your very Humble Servant,

Stamford, Nov. 16, 1724.

Francis Howgrave.

AN ACCOUNT OF THE SUCCESS OF Inoculating the SMALL POX in *Great Britain*, for the Year 1724.

WITH A COMPARISON

Between the Miscarriages in that Practice, and the Mortality of the *Natural Small Pox*.

By JAMES JURIN, M.D. R.S.Secr. Physician to Mr. *Guy*'s Hospital, and Reader of Anatomy at Surgeons-Hall.

Nec temerè, nec timidè.

LONDON:

Printed for J. PEELE, at *Locke's Head*, in *Pater-noster-Row*.

AN ACCOUNT OF THE SUCCESS OF Inoculating the SMALL POX, &c.

IN my Account of the Succeſs of Inoculation, publiſh'd laſt Year, I declar'd my Deſign of acquainting the Publick with the Progreſs of that Practice, from Year to Year, till it ſhould either be eſtabliſh'd upon a firm and laſting Foot,

or

or ſhould be juſtly exploded, on Account of its being found by Experience to be prejudicial to Mankind. I now acquit my ſelf of that Promiſe, and am the more encourag'd to do ſo, from the kind Reception my former Relations have generally met with: Even the Adverſaries of this Practice, as far as I know, allowing that the Account I have given is juſt and fair, or at leaſt none of them having offer'd to bring any Charge of Partiality againſt me, nor having produced any one Inſtance of a Miſcarriage by Inoculation, more than thoſe I had related, notwithſtanding the general Invitation I publiſh'd to that Purpoſe. Indeed, I have been ſo far from erring on that Side, that I have rather given Occaſion to the Friends of Inoculation to complain, that I have inſerted ſome Perſons in the Number of thoſe ſuſpected to have died of the inoculated Small Pox, where, as they contend, there is no Room for ſuch Suſpicion, their Death

being

being manifestly owing to other Causes. But I chose rather to transgress on this Hand, especially as by representing all the Particulars of those Cases, that had come to my Knowledge, I had put it in the Power of intelligent Persons to make their own Judgment of them, than to lay my self under a Suspicion of stifling the Truth, by omitting any one Case that could possibly be thought to turn to the Disadvantage of that Practice. I shall give the Account of the Practice for the last Year in the same Manner, delivering only the Matter of Fact, without engaging in Disputes about it. If any Person, finding me mistaken in any Particular, will be pleas'd to set me right, I shall thankfully receive the Information, and shall rectify what is amiss in the Account: but I must desire to be excused from entring into any Controversy upon this Subject, and hope no Body will blame me, if, considering the Manner in which the Dis-

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putes about Inoculation have been carry'd on, I am desirous to keep clear of them as much as possible.

The Reader will perhaps be surpriz'd, that a Practice, which hitherto seems to have so much the Advantage above standing the Hazard of the Small Pox in the Natural Way, should have been so little used the last Year, as appears from the following Account: But the Reason seems to be obvious enough. For People do not easily come into a Practice, in which they apprehend any Hazard, unless they are frighted into it by a greater Danger. This plainly appears from the State of the natural Small Pox and that of Inoculation in *London*, for the 3 Years last past; for as the Small Pox in the natural Way was much less fatal the last Year than in the Years 1722, and 1723; so the Number of Persons inoculated that Year was much less than in the two former. And that this was owing to that Cause,

and

and not to the Practice's declining and growing into Discredit, is plain from this present Year, in which we have had already a considerable Number of Persons who have undergone this Operation, from the Allarm, as I suppose, occasioned by the Small Pox in the natural Way, which has been for some Time very mortal. And the same Remark may be made with Regard to Towns in the Country, where scarce any Person has ventur'd upon Inoculation, unless when the natural Small Pox has made a great Ravage in the Neighbourhood; so much more are we influenc'd by our Fears of a present Danger, than by the Apprehension of a remote One. For otherwise, I suppose, it would be more prudent to undergo Inoculation at a Time, when the natural Small Pox is the most favourable, than in a Season, when either from the Constitution of the Air, or the Species or Degree of Infection, which then prevails, the Distemper is more than usually epide-

mical and mortal; for it is, I think, to be apprehended, that when this Diſtemper is the moſt fatal in the natural Way, it may be leſs favourable, even when given by Inoculation, than in another Seaſon, and a different Conſtitution of the Air; at leaſt there will be leſs Hazard of an Infection already taken, in the one Seaſon than in the other. For that the Infection may be received into the Body, and yet the Party continue for ſome Days, as a Week or more, ſeemingly healthful, appears plainly from what is obſerv'd in the Practice of Inoculation; when we often ſee ſeven or eight Days to paſs after the Operation, not only before the Small Pox come out, but even before the leaſt Degree of Sickneſs or Diſorder appears in the Patient. And who can ſay it is not ſo after the Infection of the natural Small Pox is received into the Body? There are at leaſt ſome Inſtances of Perſons inoculated, where there is very little Reaſon to doubt of their having been

infected

infected, tho' no Symptom of it then appear'd, before the Operation was perform'd. And how ſhall we know, till Experience farther informs us, whether we do not add to the Danger of the Diſtemper, when we give a new Infection by Inoculation, to one who has already received the Contagion in the natural Way?

But waving theſe Matters of Speculation, I proceed to the Continuation of my Account to the End of the laſt Year; and as what I have all along propos'd, has been a Compariſon between the Danger of the Natural and Inoculated Small Pox, I ſhall proceed in the Method I took before, and ſhall firſt give ſome Additions to the Numbers already publiſh'd, of thoſe that underwent and died of the natural Small Pox, before I come to ſpeak of thoſe that were inoculated for that Diſtemper.

	Sick of the Small Pox	Died
By the former Account,	14823	2412
At *Shaftsbury* —	660	109
Dedham near *Colchester* —	339	106
Plymouth —	188	32
	16010	2650

It were to be wiſhed, that we had more of theſe Accounts taken by careful Perſons, by an exact Enquiry from Houſe to Houſe; but in the mean Time, conſidering the Number of Places this Account is taken from, in different Years, and different Seaſons of the Year, with the Largeneſs of the total Numbers, I imagine we cannot greatly err, if we determine the Danger of dying of the natural Small Pox to be that of one in ſix, or thereabouts, as appears by this Computation.

The

The Number of Perſons inoculated the laſt Year, as far as I have been able to collect it, is as follows, taking in four Perſons inoculated the Year before, which came too late to Hand to be inſerted in my laſt Account.

Inoculated in *London*,

By *Claudius Amyand*, Eſq; Principal and Serjeant Surgeon in Ordinary to his Majeſty,	11
By Mr. *Maitland*, Surgeon, (beſides 9 inoculated at *Hanover*, not inſerted in this Account,)	4
Mr. *Pemberton*, Surgeon, ——	3
Mr. *Cheſelden*, Surgeon, by the Direction of Dr. *Plumptre*,	1
Mr. *Pawlett*, Surgeon, ——	1

At *Norwich*,

By Dr. *Howman*, ——	2
By Dr. *Offley*, ——	1

At *Ipſwich*,

By Dr. *Beeſton*, ——	3

At

At *Sevenoake*,
By Mr. *George Lake*, Sen. Surgeon, 3

At *Wincheſter*,
By Mr. *Goodwin*, Apothecary, — 1

At *Shaftsbury*,
By Mrs. *Dorothy Ringe*, — 2

At *Ottry* St. *Mary*, *Devonſhire*,
By Mr. *Skinner*, Apothecary, — 6

At *Plymouth*,
By Mr. *Tolcher*, under the Care of Dr. *Oliver*, — 3 2

Total 40

The

The following Table contains the several Ages of the Patients, with the Success of the Operation, in the same Manner with that I publish'd last Year.

Age.	Persons inoculated.	Had the Small Pox by Inoculation.	Had an imperfect Sm. P. by Inoculation.	No Effect.	Suspected to have died of Inoculation.
Under 1 Year.	0	0	0	0	0
1 Y to 2.	0 0	0 0	0 0	0 0	0 0
2 to 3	3	3	0 0	0 0	0 0
3 - 4	2	2	0	0 0	0 0
4 - 5	2	2	0 0	0 0	0 0
5 - 10	11	10	0	1	0 0
10-15	4	3	0	1	0
15-20	7	7	0 0	0	0
20, &c.	9	9	0 0	0 0	1
Age unknown:	2	2	0	0	0
Total	40	38	9	2	1

By

By the Account I publiſh'd laſt Year, it appears, that of 443 Perſons, who receiv'd the Small Pox by Inoculation, there were nine ſuſpected to have died of it; and conſequently, the Hazard of dying of it, allowing all theſe 9 to be fair Caſes, was reckon'd to be that of one in 49; and in this Table we have one Perſon out of 38, ſuſpected to have died of the inoculated Small Pox. If all theſe be reduced to an Average, we ſhall have ten Perſons ſuſpected to have died of Inoculation, out of 481, and conſequently this Hazard may be eſtimated to be that of one in 48: Which is the utmoſt that is pretended to by the Oppoſers of this Practice; whereas in the natural Way it is that of one in 6.

The Caſes of thoſe nine Perſons were publiſh'd in my laſt, and I ſhall here give the Caſe of this one, as it is contain'd in a Letter from the learned Dr. *Fuller*, Phyſician at *Sevenoake* in *Kent*, to Sir *Hans Sloane*, Bar.

To Sir Hans Sloane, *Bar:*

Honoured Sir,

I Delayed my Answer to yours till now, because it was necessary to get what Information I could of Mr. *George Lake*, senior, Surgeon, that inoculated, the Nurse that attended, and a Man that underwent the same Operation, and was with him all the Time.

William Jeffery of *Sevenoake* in *Kent*, was about 25 Years of Age, naturally of a good Constitution; but had broken it by giving himself up to drinking Strong Beer, and (as I think) Spirits, which occasioned frequently Pimples in his Face, and render'd him subject to a Cough, Shortness of Breath, inflammatory Distempers in his Breast, Stitches and Rheumatic Pains; add to all this, it's said, that never any of his Blood, that had the Small Pox, recovered.

He came from *London* thirteen Days before Inoculation, and it's very likely had both heated his Blood, and also taken Infection; for some Days before the Operation, he felt Aguish Shiverings, Uneasiness, and Shootings in his Limbs; which he would not make known (as he afterwards confess'd) for fear he should not be inoculated.

28 *Oct. Wednesday*, towards Night, (having not been let Blood, vomited, or purged,) he was inoculated, together with another Man, and his Child, of about 7 Years old; both which, after Eruption, passed their Small Pox, without any Sickness at all.

29. *Thursday*, he walked 3 Miles to an Alehouse to drink Strong Beer, and back again that Evening. The same Night he felt Anguish, and Shiverings.

30. *Friday*, in the Night, he had some Gripes, and two loose Stools; but never had any more.

31.

31. *Saturday*, he walked to the ſame Alehouſe and back again, on the ſame Errand.

2 *Nov. Monday*, he rode on Horſe-back to drink, as before, at the ſame Alehouſe.

6. *Friday*, he grew ſick, vomited, but not much, felt great Pains in his Limbs, and ſuch violent Ones in his Back, that he could not go, no nor ſtand upright.

8. *Sunday*, the Pocks ſhewed themſelves, chiefly near the inoculated Places, and in his Face.

9. *Monday*, they broke out in great Numbers, and among them ſome Purples.

10. *Tueſday* Morning I ſaw him, (but never before nor after,) then they had filled not only his Face, but his whole Body all over; and among them were interſperſed (eſpecially on his Hips) innumerable (not very ſmall) flat Spots, of a light fiery Purple Colour, ſuch as are ſeen in the Bleeding Small Pox. Theſe elevated a

little towards the laſt, but never changed Colour till a Day or two before Death; and then they became of a dusky Blew, inclining to Blackiſh.

The other *Variolæ* cluſtered a little in his Face, grew not out much, had no Redneſs at their Roots, never ſwelled, nor tended to any Ripeneſs.

11. *Wedneſday*, he began to ſpit, but that continued but a Day or two, and then went off again. During his whole Sickneſs, he ſeemed not perfectly ſenſible, and had very little Sleep.

13. A Fever (which had not ſhewed itſelf before) roſe a little, but came to no great Height; his Urine came away involuntarily.

14. Bliſters, with clear Water in them, broke out upon his Wriſts and Hands, as big as Filbirds.

16. *Monday*, he died.

SIR,

MY Opinion I ſubmit to your Judgment; but my Thoughts are, that

that he had a mild Sort of Small Pox by Inoculation; and almoſt a bloody Sort by Infection and Ill-management of himſelf, which took away his Life.

That a Perſon may have two Sorts at the ſame Time, I know by Experience.

I was with one who had a confluent Species broke out on *Saturday*, and a diſtinct on *Tueſday* following; and both continued and held diſtinguiſhable to the laſt; and the Perſon with great Difficulty recovered. The youngeſt Brother of the Lord *Weſtmorland*'s had likewiſe two Crops of two Sorts: I was with him, but he died.

A Gentlewoman under my Care, in a flagrant fluxing Pox, lay the 12th Day after Eruption, ſenſeleſs, in Convulſions all over, and with a Pulſe ſo ſuppreſſed, that with all the Attention I could uſe, I could not perceive it move in the leaſt: But that Night a freſh Crop of the diſtinct Kind burſt

out,

out, by which her Senſes returned, and ſhe recovered from that Time. But tho' thoſe *Variolæ* came out in elevated Puſtules, yet they never grew, nor coloured, but went away again in a few Days without breaking Skin.

This Caſe I have taken Care to inform my ſelf of ſo perfectly, that you may depend upon its being all poſitively true. I am,

SIR,

Sevenoake,
*Dec.*30.1724.

Your moſt Faithful,

And moſt Obedient Servant,

TH. FULLER.

How

How far this Perſon's ill State of Health, or his great Irregularity after the Operation, may have contributed to his Death, is ſubmitted to the Judgment of the impartial Reader.

Beſides the Perſons inoculated in *Great Britain*, to which my ſeveral Accounts have hitherto been confin'd, I have receiv'd ſome from other Parts, which at firſt I had Thoughts of inſerting; but the Difficulty I have found in making a perfect Collection of all the inoculated Caſes here at Home, gives me little Inclination at preſent to extend my Account to Countries beyond Sea, where I muſt expect that Difficulty will be much greater; nor indeed is it neceſſary ſo to do, ſince I imagine, the Succeſs of this Practice in *Great Britain* will be ſufficient to determine the Fate of it one Way or the other.

The

The following is inſerted at the Deſire of Mr. *De Grave*, whoſe Daughter I have ſeen, purſuant to his Requeſt, and find the Account he therein gives of her preſent State of Health, and particularly of her Arms, to be true.

To Dr. Jurin, *Secretary to the Royal Society.*

Berwick-Street, Soho.

SIR, *Apr.* 15. 1724.

I Have lately read a Pamphlet, entituled, *Reaſons againſt the Inoculation of the Small Pox, in a Letter to Dr.* Jurin, *by* Francis Howgrave, *Apothecary*, dated at *Stamford*, *Nov.* 16. 1724. wherein the Author, Page 60 and 61, thinks proper to call upon me in the following Words, *viz.*

" And

" And though Mr. *Degrave* po-
" ſitively aſſerts in Mr. *Maitland's*
" Book, Page 53, that his Daughter
" got well in eight Days from the
" firſt Eruption; and Mr. *Maitland*
" backs this Account, Page 27, by
" ſaying, What Dr. *Wagſtaff* ſays of
" his Fears of a great Claſs of Hy-
" pothetical Diſeaſes, is all vaniſhed,
" and the Girl is very well: Not-
" withſtanding they aſſert this, yet I
" have this Favour to beg of Mr. *De-*
" *grave* and Mr. *Maitland*, to lay
" their Hands upon their Hearts, and
" inform me, *bonâ fide*, whether ſhe
" has not been in a worſe State of
" Health ſince ſhe was inoculated,
" than before? Whether the Arm in
" which ſhe was inoculated is not
" withered? And laſtly, Whether
" ther there is not a watry *Ichor* con-
" tinually diſcharging from it? When
" they are pleaſed to anſwer theſe
" few plain Queſtions, they may
" perhaps know the Reaſons why I
" ask them.

Sir, In anſwer to all theſe Queries, I ſay, they are entirely groundleſs; for my Daughter's Health is, and hath been, ever ſince I wrote her Caſe to Mr. *Maitland*, perfectly good, her Arms being whole and ſound, and ſo far from being withered, or from diſcharging any *Ichor*, that they are grown in Proportion to her Body, and are as fleſhy, and as ſtrong, and free from any Humour or Diſcharge whatever, as they were before the Inoculation; nor is there, I verily believe, a Perſon of 15 Years of Age, more grown in Stature and in Strength than ſhe has done within theſe three Years. I would have ſent you, Sir, an Affidavit of this, could I have thought it had added to the publick Satisfaction; but my Daughter having been viſited by Hundreds, and this being a Thing Mr. *Howgrave* could ſo eaſily have been ſatisfied in, 'tis very ſtrange he would not be at ſome Pains in a Caſe he has made ſo many Inferences from; I therefore cannot

cannot but wonder, that I, who (as a Surgeon) can have no Intereſt in ſpeaking in Favour of Inoculation, (being I never inoculated any,) ſhould without any Cauſe given, be called upon in a Manner that attaints my Honour and Veracity; and that Mr. *Howgrave* ſhould think himſelf authoriz'd thus to vilify and abuſe me in Print, for having ſtated and repreſented my Daughter's Caſe, *bonâ fide*, in ſuch Manner as it has appear'd to me, and to very many of the Faculty, and other curious and candid Perſons, who have conſtantly attended and frequently viſited her, both when ſhe was inoculated for the Small Pox, and ſince her Recovery of that Diſtemper. The Singularity of her Caſe having excited the Curioſity of Numbers, as well of thoſe who, having been Eye-Witneſſes of what had appear'd on her during her Confinement after the Inoculation, did atteſt that ſhe had had no Small Pox then, or any thing like it, as of thoſe who had receiv'd for Truth a fabulous Story ſpread abroad, and recorded in

Dr. *Wagſtaff*'s Book, *viz.* That my Daughter had had the Small Pox twice, that is, once during her Confinement after the Inoculation, and by Infection in the natural Way in eleven Weeks after the Inoculation. I muſt confeſs I do not underſtand what Mr. *Howgrave* means, when he ſays, "That if Mr. *Maitland* and I are "pleaſed to anſwer the three plain "Queſtions above-mention'd, we may "perhaps know why he asks them." But ſure, it is evident, I have not deſerv'd being us'd ill for having aſcertain'd the Truth, but rather ſhould have been commended by that Perſon, who quoting your Words, Page 24, ſays, "That, to impoſe upon the "World in any Particular, is diſingenuous and baſe; but to deceive "them in an Affair ſo nearly con-"cerning the Lives of Mankind, is "a Wickedneſs worthy of the utmoſt "Abhorrence and Deteſtation." 'Tis to be hoped this Lover of Truth, and impartial Writer, has obſerved this Rule, and therefore will be pleaſed to give the Publick the Satisfaction

tion of producing the Vouchers he has grounded his plain Queries upon, being he ſays, Page 53. " When this " or any other of my Accounts are " call'd in Queſtion, I ſhall be ready " to produce my Vouchers.' This the World expects of him, and the more, becauſe it does not appear that Mr. *Howgrave* has made good even this Part of his Title-Page, where he declares that he makes " a full An- " ſwer to every thing that Mr. *Mait-* " *land* and others have advanced upon " that Subject, or that he has taken any " Pains to know my Daughter's Caſe;" tho' he ſays, Page 63, " I wiſh it had " been as much in my Power as it is " in my Inclinations to have ſet this " Controverſy in a ſtill clearer Light, " which I would have done, had ſe- " veral Perſons had as much Honour " to acknowledge the Misfortunes " they ſuffer'd to be brought upon " them by this Practice, as others " have been ready to certify the Suc- " ceſs of this Method:" For had this Gentleman exerted his Power, and uſed Endeavours purſuant to his Incli-

Inclinations to know my Daughter's Caſe, 'tis hardly credible, that a Caſe which has made the Talk of the Town for ſome Years paſt, and has excited the Curioſity of ſo many, had eſcaped his Knowledge; for, as Archbiſhop *Tillotſon* (Sermon 139) rightly obſerves, "a Man may for once be "impoſed upon by an Illuſion of "Fancy, in a Thing which he vio-"lently deſires or expects, and which "runs ſtrongly in his Mind; but "when there is Time to examine "Things and compare Circumſtances "together, and to look narrowly "into them, and to try them by ſe-"veral Senſes and at ſeveral Times, "for ſo long a Space, it is morally, "nay almoſt naturally, impoſſible, "that any one in his Senſes, much "more ſo many Hundreds of Perſons, "ſhould in ſuch Circumſtances be "groſsly deluded in a plain ſenſible "Matter of Fact." To conclude, ſhould Mr. *Howgrave* decline to ſet this Controverſy in a ſtill clearer Light, now I have had *ſo much Honour as to acknowledge the Misfor-*

tunes

tunes brought on my Daughter by this Practice, I ſhall expect, if his Story of my Daughter's wither'd Arm, *&c.* improves, (as much as the Report of their Highneſſes being in the ſame Condition has, notwithſtanding the greateſt Evidence to the contrary,) that the intereſted Oppoſers of Inoculation will ſoon ſpread abroad, that wither'd Arms, perpetual running Sores, and perhaps cloven Feet, are the ſure and conſtant Effects of Inoculation; and that the Horn upon the Woman's Head, that is now ſhewn in Town, ſprung from Inoculation. I am,

SIR,

Your moſt Humble Servant,

ISAAC DEGRAVE.

P. S. I beg the Favour of you to print this in your Account of the inoculated Small Pox; but I hope that before, you'll give me Leave either to bring my Daughter to you, or that you will be pleas'd to call upon her, that you may be convinced of the Truth.

FINIS.

ADVERTISEMENT.

ALL Persons concern'd in the Practice of inoculating the Small Pox, are desir'd to keep a Register of the Names and Ages of every Person inoculated, the Place where it is done, the Manner of the Operation, the Days of sickening and of the Eruption, the Sort of Small Pox that is produc'd, and the Event.

Where the true Small Pox is not produc'd by Inoculation, it will be of Use to take particular Notice, whether the Patient had any other Kind of Eruption, what Symptoms preceded or attended it, whether the Incisions inflam'd and run, and for what Time their Running continu'd.

In Case any Person shall happen to die after Inoculation, either in the Course of the Small Pox, or after they are gone off, it is desir'd that a particular Relation of the Case may be made, and attested, if it be judg'd necessary, by the neareſt Relations of the Party deceas'd, or by other credible Persons, that were Witnesses to the Fact.

They are intreated to send these Accounts, or an Extract from them, comprehending all Persons inoculated from the Beginning, to the End of the present Year, to Dr. *Jurin*, Secretary to the Royal Society, some Time in *January*, or at fartheſt in *February* next, that so the Result of them may be publish'd early in the Spring.

Lincolns-Inn-Fields,
May 12. 1725.